

MACDONALD COLLEGE JOURNAL



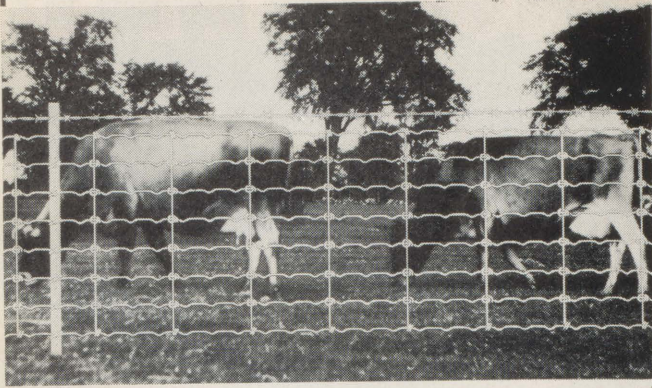
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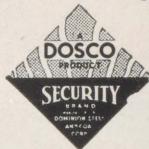
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Canada's FARMS... BRITAIN'S TABLE

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The Farmer's Share Remains the Same

ESTIMATED CASH INCOME FROM SALE OF CANADIAN FARM PRODUCTS

	1939 \$	1940 \$	1941 \$	1942 \$	1943 \$
Field Crops and Fruit	332,500,000	290,500,000	312,100,000	343,600,000	501,400,000
Live Stock	185,300,000	245,300,000	320,900,000	383,400,000	449,700,000
Poultry and Eggs	52,200,000	56,200,000	64,600,000	97,900,000	124,300,000
Dairy Products	113,800,000	127,000,000	165,400,000	227,200,000	249,000,000
Other Sources	38,500,000	46,800,000	51,000,000	62,600,000	72,900,000
TOTAL	722,000,000	765,000,000	914,000,000	1,114,900,000	1,397,300,000

The May number, which is Number 36 of the series of pamphlets entitled "Canada at War" prints a table on page 16 which we reproduce here.

This is a valuable table showing the total and differences in the rate of increase of the various classifications here used. It is the total that specially concerns us here. This total presents only part of the picture. Forming only part of the picture it comes in the class of the half truths that are sometimes more mischievous than gross errors. The most striking part of these figures, to the average man, is the very great increase (93.4 percent) in the value of farm products sold in 1943 as compared with 1939. This is due in some measure to an increase in unit prices but also to the great increase in volume of production.

What is not presented is the relative level of the 1939 total when unit prices of farm products were lower than they were in 1913, nor is any reference made to comparable figures for the years 1926-29. Further, there is no reference made to the increase in the national income during the years from 1939 to 1943. At least one or all of these comparisons must be used to complete the picture or to form a proper understanding of the situation.

The average annual income for the 5 years given was \$982.7 million. The average annual income for the 4 years, from 1926 to 1929 inclusive, was \$965.7 million. Thus the average for the 5 years (1939-43) was 17 million more than that of the 4 years 1926-1929. This increase was less than 2 per cent but the farmer's share of the national income was of course much greater during the years from 1926 to 1929 than it has been during the war years so far. It is not necessary to go so far back to present a more complete picture. All that is

necessary is to present the total national income as compared with farm income for the years in question. The Economic Annalist furnishes the figures necessary —

NATIONAL INCOME AND FARM CASH SALES (Figures in Millions)

	Total National Income \$	Farm Cash Income \$	Per Cent of Farm Cash Sales to Total
1937	4,342	646	14.9
1938	4,246	664	15.6
1939	4,862	722	14.9
1940	5,400	766	14.2
1941	6,500	914	14.1
1942	7,500	1,115	14.9
1943	8,800	1,397	15.0

From 1939 to 1943 the proportion of income from cash sales of farm products increased from 14.9 to 15.9 per cent. At the same time the average proportion of the two pre-war years was 15.25 per cent while the average of the 5 years given in the first table was 14.8 per cent. Thus the proportion of income from cash sales of farm products has actually been slightly lower than the average of the two years prior to the war. The difference was so slight that the title of this editorial remains fairly suitable. This discussion stresses once more the need for not only getting facts straight but also the need for presenting all those facts that are pertinent to the subject.

Our Cover Picture

The farm shown on our cover this month is at Ivry, P.Q., on Lake Manitou in the Laurentians. It is the home of Marcel Dore and the photo was taken by Prof. Crampton.

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He Lived Alone

by Bruce Hutchison*



man, the papers would have carried lengthy obituaries and flattering editorials. But he was only a farmer. He had never sought publicity in life and would not have wanted it in death. His life, like the life of every man upon the land, was concerned with matters which the public has never understood or even suspected.

It was a life devoted to one single purpose — production. This is something which, in peacetime, is overlooked in half the current philosophies of economics and politics. It is something absent from the life of many of our people altogether — or, if present, scarcely touches the understanding, much less the imagination of the worker, who is separated from the result of his labor by a jungle of machinery and a wilderness of management.

My neighbour produced more real wealth than most of the prominent occupants of the obituary columns. He produced it by his own labor and by his own courage, gambling everything he had on the earth and the weather. But as he made no fuss about it, made no appeal to the government or anyone else for assistance, and laboured almost as invisibly as the round of the seasons, no man noticed him, no newspaper wrote about him, and at the time of his death only a handful of people saw him return to the earth which he had served. But he had done more for the country than most of its leading citizens.

The leading citizens leave long obituaries in the newspapers and perhaps a marble monument in the cemetery. My neighbour left 300 acres of cleared land, all surging up at this season in urgent growth to feed hungry people. This land will be feeding people long after the newspaper obituaries have faded from the yellowed newsprint, long after the names on the monuments have been forgotten and with them the names of all our generation. My neighbour was thus the most successful man I know.

His success was to be reckoned not only in accomplishment but in happiness. He was also the happiest man I ever knew. He was nearing seventy when we came out to live in the country beside him, but even then his figure, bent from toil, still strode fast across his fields at dawn, or

silhouetted against the skyline, in the twilight. For with him, as with all such men, the land was a hunger and a passion in his blood, and he could hardly bear to leave it even to eat and sleep. The land, for its part, never failed him.

Prices might fail. The madness of other men in cities might prevent the growth of this land reaching the hungry people. But the land always produced, and to a man who loved it, this, with his daily bread, was enough. Thus we would see him behind the plow in early spring, when the sun glistened on the new furrow and the white seagulls screamed at his heels for the upturned worms. In the summer we would see him driving his mower or pitching hay up to his big wagon. In the autumn he hauled the tall corn in, and in winter he would bend over his saw, cutting next year's firewood.

He came to know every corner of the land, every tree in the woods. Because he loved the land and the woods he would not sell them and he would not desolate them. In every field, though it increased the labour of harvest and reduced the yield, he left the best oak trees and sometimes he would stop his team to look at them. The white lilies of the woods he left untouched so that they multiplied and the children played among them in the springtime, and in a May evening he would walk out of his way to see the changing procession of wild flowers.

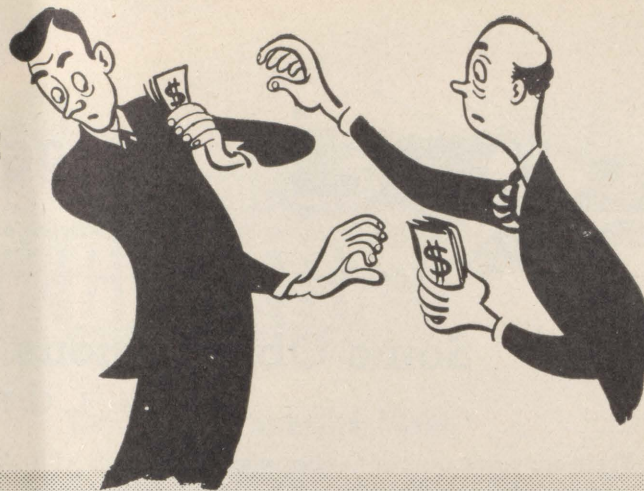
He found a wilderness here. He left a farm. This entails more responsibility than the city man is likely to know. Half a hundred cows depended on him morning and night. His horses were like friends. Without his care the land would have gone back into the wilderness in a year or two. But I think it was all play to him and, whereas a city worker makes a living by toil, he made it by pleasure.

Often I have seen him stoop down and pick up a handful of the dark loam of his field and rub it between his fingers and say it was good earth. That was all he wanted in life — good earth to till, for in its processes of growth he was able to detect a rhythm in life, a pattern, a reasonable plan, a fulfilment which has generally eluded the intelligent and successful people of the world.

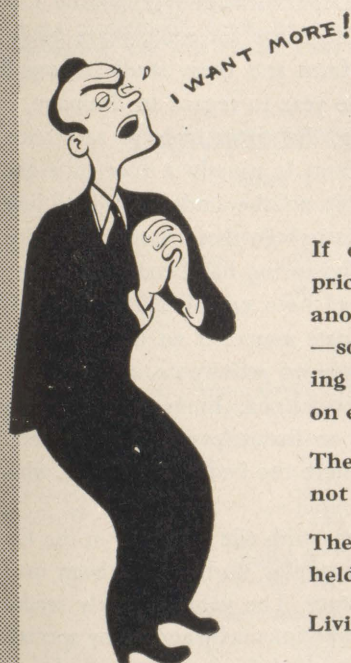
This fulfilment was complete since he could leave his farm to a strong son who, though they probably never discussed it, understood the purpose of the land as well as his father. The bent figure against the skyline is gone, but without pause the farm goes on, the growth swells, the real wealth increases in the soil and, like most important things, is unnoticed, save by a few men whose names will never reach print.

* One of the Editors of the Winnipeg Free Press.

ONE MAN'S **IN**COME IS ANOTHER MAN'S **OUT**Go...



IF rising prices and costs were allowed to keep pushing each other up, inflation would be unavoidable. That's what inflation is—a panic rise in prices—with money losing its value and confusion everywhere. To prevent inflation, a ceiling has been set on prices and profits,—wages and salaries have been controlled.



If one person demands higher prices—another higher profits—another a higher wage or salary—soon everybody would be making the same demands—demands on everyone else.

Then costs of production could not be controlled.

The ceiling could no longer be held.

Living costs would go up—

INcome **OUT**go
OUTgo
and **IN**come
begin their frantic rise.

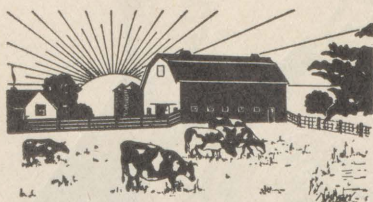
SO WE WANT MORE
TOO!



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LISTEN TO "IN THE SPOTLIGHT" RADIO PROGRAMME
EVERY SUNDAY NIGHT 7.30 p.m., E.D.T.

This is one of a series being issued by the Government
of Canada to emphasize the importance of preventing further
increases in the cost of living now and deflation later.



AGRICULTURE

Articles on problems of the farm

Some Observations on Land Drainage

by L. G. Heimpel

There are many areas in Quebec where farm lands with more than sufficient slope for good surface drainage are kept wet throughout the spring and summer by seepage from higher ground. Such conditions are particularly prevalent in the Eastern Townships. Many farmers take this condition for granted, believing that nothing practical can be done about it. However, others are not satisfied with this answer and insist that something must be done.

One such farmer is Mr. Ross Clarkson of Montreal, who has a well developed farm near Knowlton. Mr. Clarkson has several fields which are plainly in need of improvement in drainage, several of them being seriously afflicted with side hill seepage. Since labor is not available for the installation of the necessary drains by hand, Mr. Clarkson decided to purchase a used traction ditching machine with which to do the work. The machine was secured from Western Ontario through the assistance of the Department of Agricultural Engineering and was put to work at the end of May. Since the machine started operations much interest has developed among the farmers of the community. It is certain that the effects of Mr. Clarkson's attempts at improvement of this wet land will be watched with considerable interest.

It is surprising when one takes the trouble to observe these things how many fields visible from almost any highway in the Eastern Townships are plainly in need of some form of drainage to relieve wet spots caused by seepage water from higher ground. Practically every farm shows the need for this kind of improvement and very often the land seriously affected by lack of drainage is the best land on the farm once it is drained. The percentage of good land on Eastern Township farms is often small, therefore, it is all the more important that these lower lying areas be put in the best possible condition for production. Almost always lack of drainage is the critical factor in these fields, and it should be remembered that no amount of careful tillage or fertilization will permit such land to produce its ultimate crop yields until drainage is taken care of.

There is prevalent in this province a belief that under-drainage does not work in clay land, let us say in the heavy clay subsoils of our river valleys. We predict that this opinion also will be revised in the future. There are

now quite a number of under-drained farms in the various heavy land areas of Quebec. One such farm is the Raymondale farm at Vaudreuil, which is located in the heavy clay area of the Ottawa Valley. This farm was almost completely under-drained about 1913; when the crop yields of this farm are compared with those of neighboring farms not possessing under-drainage, the difference in favor of the Raymondale farm is simply astounding, ample proof that under-drainage does give results on heavy land. Another such example is the Government-owned seed farm at Saint Rosalie. The Department of Agricultural Engineering at Macdonald College has for some years made water table studies on this farm and these studies show that in the critical time of the year in regard to drainage, namely seeding time in spring, the water table or saturation level in the land on this farm is usually a foot to a foot and a half lower than it is on the undrained land just over the line fence. Some years ago the writer visited this farm on the 5th of May. The spring had been a fairly early one and all the seeding had been completed on the farm; the spring grain on that date was over an inch above ground but there was absolutely no activity on neighboring farms which were not under-drained. In fact, the only activity on the land observed on that trip was a little planting in some farm gardens where the beds were raised which improved the drainage.

There are also farms with tile drainage in the Chateauguay Valley on which similar studies have been made and which tell the same story. The value of early seeding has often been shown by experiments by agronomy specialists on our college and experimental farms. Not only does under-drainage make an average difference of from 10 days to 2 weeks in earliness of seeding, but, due to its influence on soil temperatures and improved physical condition of the soil, crops will do much better once they are started than they would without this form of soil water control. It is true that clay lands react less promptly to under-drainage and it may be that several years must elapse after the installation of the drains before the full benefits will be noticeable, but once the improvement in the soil due to drainage has been established it is permanent, provided, of course, that the outlets to the drainage system are kept in good condition.



THE WARTIME PRICES AND TRADE BOARD

FARMERS' BULLETIN

STRAWBERRY AND RASPBERRY CEILING

Price ceilings have been set on Canadian-grown strawberries and raspberries. Maximum prices apply from May 29th to September 30th with a seasonal reduction in strawberry prices to conform with the usual market drop when picking is at a peak. The order also applies to strawberries and raspberries imported from June 5 to September 30, putting them under the same ceiling as Canadian-grown berries in that period. Ceiling prices for raspberries remain the same for the whole season. The order applies only to sales of fresh fruit for market purposes and does not apply to sales to processors.

Berry-growers may sell direct to consumers or to retailers at prices set for each class of buyer. Growers' and shippers' maximum prices are F.O.B. shipping point, with free delivery within an area of 15 miles from the shipping point. Where a seller transports the berries to a buyer more than 15 miles from his farm or shipping point, he may charge the cost of such transportation, but this charge must not exceed the less-than-carload express rate.

STRAWBERRY PRICES

ZONE 1

(Southern Ontario and Southern Quebec)

	To Wholesalers		To Consumers	
	Quart	Pint	Quart	Pint
To June 24	30c	16c	42c	23½c
After June 24	19	10½	26½	15

ZONE 2

(Nova Scotia, New Brunswick, Prince Edward Island, northern and eastern Quebec, northern Ontario, Manitoba, Saskatchewan, Alberta and the Kootenay area of British Columbia)

	To Wholesalers		To Consumers	
	Quart	Pint	Quart	Pint
To June 24	27c	14½c	39c	22c
June 25-July 15	22	12	29½	16½
July 16-Sept. 10	27	14½	39	22

ZONE 3

(All other areas)

	To Wholesalers		To Consumers	
	Quart	Pint	Quart	Pint
To June 17	27c	14½	39c	22c
After June 17	22	12	29½	16½

RASPBERRY PRICES

ZONE 1

(Ontario and Quebec)

	To Wholesalers		To Consumers	
	Quart	Pint	Quart	Pint
	30c	16c	42c	23½c

ZONE 2

(Nova Scotia, New Brunswick and P.E.I.)

	To Wholesalers		To Consumers	
	Quart	Pint	Quart	Pint
	32c	17c	44c	24½c

ZONE 3

(All other areas)

	To Wholesalers		To Consumers	
	Quart	Pint	Quart	Pint
	28c	15c	40c	22½c

END OF BEE SUBSIDY PLAN

The subsidy of 50 cents a pound paid on importations of live packaged bees from the United States does not apply to bees received after June 15, 1944. Farmers who received shipments of imported bees on or before June 15 must apply for the subsidy within 90 days of date of arrival. Applications, which must show the date bees were received, should be addressed to the Commodity Prices Stabilization Corporation, Ottawa. A penalty of fine and imprisonment is provided for false information. The subsidy arrangement became effective on March 1 to help Canadian farmers meet the increased cost of importing bees from the United States.

COST OF HOG GRADING WARRANTS

Under a Board order now in effect, custom slaughterers of hogs are permitted to charge two cents a hog to cover the cost of issuing grading warrants. The two-cent charge per hog is in addition to any other legal charge the slaughterer may make for his services. Grading warrants are issued by the slaughterer and must be obtained by a seller of hogs before he can collect the premium for Grade "A" and Grade "B-1" carcasses.

LAMB WEIGHT FOR SLAUGHTERING

Regulations which restricted the slaughtering of lightweight lambs have now been changed and the minimum live weight at the place of slaughter in June, July and August is set at 60 pounds. Under an earlier Board order, the minimum slaughtering weight for lambs in the three summer months was 75 pounds live weight.

POTATO STORAGE CHARGES

On June 1, 1944, an additional storage charge of 10 cents per 75-lb. bag and 13 cents per 100-lb. bag of table stock potatoes became effective. This is the last storage increase for the season and makes a total storage allowance of 50 cents per 75-lb. bag and 65 cents per 100-lb. bag since last fall.

PRICES FOR HOME CANNERS

Because it is difficult to check individual basic period prices, the Board has set maximum prices for tomatoes, corn, beans and tomato juice produced by home canners. Uniform prices are established for all sections of Canada, in line with the "ceiling" for industrial canners. The new regulations apply to all canners with a yearly output of less than 10,000 pounds. Maximum prices are specified for sales to wholesale distributors, sales to retailers, hotels, restaurants, hospitals, institutions or camps, and sales to consumers.

For further details of any of the above orders apply to the nearest office of the Wartime Prices and Trade Board.

Canadians Plan Post-War Agriculture

by Frank Shefrin

What is needed in post-war plans, are such objectives as good homes among green fields, fair returns for work, higher living standards, a conservation program that will improve agricultural resources and jobs for everyone.

Farmers have shown what they can do in wartime. They have produced more with less help. The food the Canadian farmer produces is being sent to every battlefield. It is also being sent to the starving peoples of Greece and will be sent to the reconquered countries. Canadian food, seed and livestock will help to rehabilitate Europe.

But most farmers will remember the last post-war period. They have no desire to see a repetition of the experiences that followed World War I, or the still worse years of the Thirties. There are still many problems that have to be solved.

In planning the place of agriculture in a post-war world of plenty it is clear that study and research is an integral part of the planning process. Such a program should deal with the adequate distribution of farm goods, the effects of technological advances upon family farms and commercial farms, farm indebtedness and credit facilities, the general field of conservation, new uses of farm products, international trade, rural education, rural housing, health and nutrition, and recreational facilities. In addition, there is also the important task of enabling returned soldiers to settle on the land and become successful farmers.

A Post-War Committee in Every Province

Every province in Canada has a committee and subcommittees working on all phases of post-war reconstruction and rehabilitation. In September, 1941, the Dominion Government set up an Advisory Committee on Reconstruction, popularly known as the James Committee. Under the Advisory Committee there were six Subcommittees dealing with Agricultural Policy, Conservation and Development of Natural Resources, Publicly Financed Construction Projects, Housing and Community Planning, Post-War Employment Opportunities, and Post-War Problems of Women. The work of the Main Committee and the Subcommittees was completed by the end of 1943. Seven reports were tabled in the House of Commons by March, 1944.

There are also federal parliamentary committees on reconstruction and re-establishment composed of members of the House of Commons and the Senate. The purpose of these committees is to study and report to Parliament upon general problems of reconstruction and re-establishment which may arise at the end of the war, and all questions relating thereto. A number of briefs dealing with post-war Canada have been presented to the committees

by representatives of Government agencies, private organizations, and by individuals.

The Dominion Government and the provinces of Prince Edward Island, Ontario and British Columbia have introduced legislation providing for the establishment of departments of reconstruction. Similar action is being contemplated in practically every province. We can touch upon only a few of the recommendations on agriculture made by the Provincial and Dominion committees.

Committees Report

In January 1943, the British Columbia Post-War Rehabilitation Council presented its first interim report. The recommendations made dealing specifically with agriculture cover land settlement of veterans and others, parity prices, land clearing, application of the Prairie Farm Rehabilitation Act to British Columbia, soil surveys, farm loan board policy, vocational training in agriculture, cooperatives.

The Post-War Reconstruction Committee of Alberta presented its interim report on March 10, 1944. Some of the 45 recommendations pertaining to agricultural policy are that: soil surveys precede land settlement; a thorough survey of land methods be conducted; policies be directed toward the production of products of the quality most acceptable to the consumers in the markets in which they are to be sold; the flow of products be regulated to meet the requirements of all markets; the district agriculturist system be expanded and district agriculturalists be especially trained to instruct and advise in farm management.

The Advisory Committee on Reconstruction recognized the importance of agriculture, for in its report it stated: "It may be suggested that Canadian agriculture is a mirror that reflects the state of affairs of Canadian industry, and indeed throughout the western world. Something undoubtedly can be done through purely agricultural policy to improve the condition of the Canadian farmer. But his prosperity and security for some years to come will be dependent upon the success of other segments of reconstruction policy at home and abroad."

Three of the Subcommittees dealt directly with some phases of agriculture. Yet indirectly all the recommendations affect the farmer for the farmer's stake in full employment in the nation's non-agricultural industries is fully as great as that of the labourer who draws his wages at the plant pay window.

International Trade:— All the Committee reports placed emphasis on the importance of export trade to agriculture and the need for Canada to take a definite lead in promoting at every opportunity the adoption of an international policy which recognizes its importance. Of all farm products, wheat is most dependent upon export markets.

The Subcommittee on Agricultural Policy suggested that a National Wheat Marketing Council be established to promote an increased export of Canadian wheat and wheat products. Steps have been taken in this direction. The United States, Canada, Australia and Argentina and the United Kingdom agreed to act together to meet unexpected developments in wheat marketing in the immediate post-war period. The United Nations Relief and Rehabilitation Administration and United Nations Conference on Food and Agriculture are milestones in the endeavours to achieve an orderly and expanded world trade.

Food for All:—The Subcommittee on Agricultural Policy recommended that nutritional standards at home be raised. As a start, the Subcommittee suggested that milk and hot lunches be provided for school children.

Chemurgy:—The various committees took a cautious view of the industrial utilization of agricultural products. In Manitoba, a special report on the industrial use of plant and animal products was published by the Post-War Reconstruction Committee. The Report makes a series of specific recommendations on research and pilot plants. In all cases, it was recommended that the Dominion and provincial governments take the lead in research in this field.

Agricultural Research and Education:—Agricultural research, education and extension services came in for consideration. The three reports recommended that these services be expanded.

Cooperation:—Cooperative organization was supported by the Dominion and provincial committees. The Subcommittee on Agricultural Policy recommended that the Dominion and provincial governments use all reasonable means to encourage and assist in the organization and development of cooperative activities in agriculture. The recognition of this principle goes far beyond the Canadian borders. It is interesting to note that the United Nations Conference on Food and Agriculture, the International Labour Office, and the United Nations Relief and Rehabilitation Administration, all laid great emphasis on cooperative organizations as a means of handling efficiently some of agriculture's post-war problems.

Land Settlement:—On the question of land settlement, Dominion and provincial Post-War Reconstruction Committees have been very careful. They are agreed that past mistakes in land settlement programs should not be repeated. All the reports recommended that land settlement should be preceded by a soil survey and by classification of land, and sub-marginal lands withdrawn from use for crop production and set aside for reforestation, community pastures, or other suitable uses.

This is especially important as the Dominion government has made specific provisions for the settling of veterans on the land. Each of the provincial governments in its post-war planning is giving thought to this program. In all cases land is being carefully surveyed to see that it is fit for farming. In British Columbia, the province has set aside as a gift one million acres of soil surveyed land

for the benefit of British Columbia ex-servicemen who can qualify under the Veterans' Land Act of 1942.

Farm Credit:—Farm credit has long been a controversial subject. The depression and the drought years have made farmers very sensitive on this point. Although farmers have been able to pay off a great deal of their indebtedness in the last few years, it is felt that steps should be taken to provide a farm credit system that will be able to avoid the grief and difficulties of past years. The Dominion and provincial committees felt that remedial action should be taken, although no specific suggestions were made. The Agricultural Subcommittee recommended that the services available through the Canadian Farm Loan Board be extended by liberalising the conditions under which loans are made; and that in recognition of the contribution of credit unions in meeting short term credit needs of agriculture, the Dominion Government join with the provincial governments in giving encouragement and support to such organizations.

Rural Electrification:—The Subcommittee on Agricultural Policy together with the Subcommittees on Conservation and Development of Natural Resources and Post-War Problems of Women, recommended a broad rural electrification program with federal assistance from public funds if necessary. The provinces of Alberta, British Columbia and Manitoba made a similar recommendation. However, Manitoba is the only one that has as yet come out with a specific program. The Manitoba Electrification Enquiry Commission recommended that Hydro Electric Power be extended to the majority of Manitoba's 58,686 farm houses and that the project be started immediately after the war with a minimum of 1,000 farms serviced the first year. This number is to be increased each year with at least 25,000 homes serviced at the end of ten years. This recommendation is important because it will provide not only a rural facility which is very much needed by farmers but also because it might well form part of a post-war public investment program.

Farm Housing: Farm housing in Canada has been the forgotten child of housing policy. The present standard of farm homes has reached such a low level that Committees in all provinces as well as in the Dominion have recognized the urgent need for improved housing standards. A fairly detailed program was worked out by the Subcommittee on Housing and Community Planning. At least 125,000 new farm homes are required — of these 100,000 are for replacements and 25,000 to reduce overcrowding. In addition, 188,000 dwellings will have to be repaired and improved and improvement does not mean only paint or lumber, but facilities such as plumbing and electrical equipment. Such a program, it is estimated, would involve an expenditure of one-quarter billion dollars in the course of the first ten years after the end of this war. The Subcommittee recommended that in a redrafted National Housing Act a special section on farm housing be included. In order to reduce

(Continued on page 27)

Penicillin: Some Facts

by F. S. Thatcher

What is "penicillin", this so-called new wonder-drug? Many research workers would like to know the exact answer to that question, though it is probable that some of the many chemists working on the problem will by now have formed a good idea of the nature of this very valuable drug.

Sixteen years ago an English scientist, Dr. Fleming, while studying some cultures of disease bacteria, noticed that in one culture, which had become contaminated by a fungus growth, the growth of the bacteria had been checked around the fungus. The trained scientific mind of Dr. Fleming immediately set to work to discover why the bacteria had been killed in this particular culture dish. He found that the contaminating fungus, which was *Penicillium notatum*, was producing some substance which destroyed the bacteria with which it came in contact. In co-operation with Dr. Florey and other research workers at Oxford University he succeeded in isolating this substance, which they named penicillin, and they found that it was of great value in combatting disease.

War came — and this group of men realized the importance of this new substance in treating wounds. But English research centres were being smashed by bombs. In a fine spirit of international co-operation they took their secrets and experience to the United States where the government gave whole-hearted support to a programme of penicillin production. Most of the experimental strains now in use in innumerable laboratories are progeny from the colony first observed by Dr. Fleming. American methods of production and use have since been made available to Mexico, China and Russia.

Penicillin is by no means a "cure-all" but painstaking medical research has proved that it can destroy a large

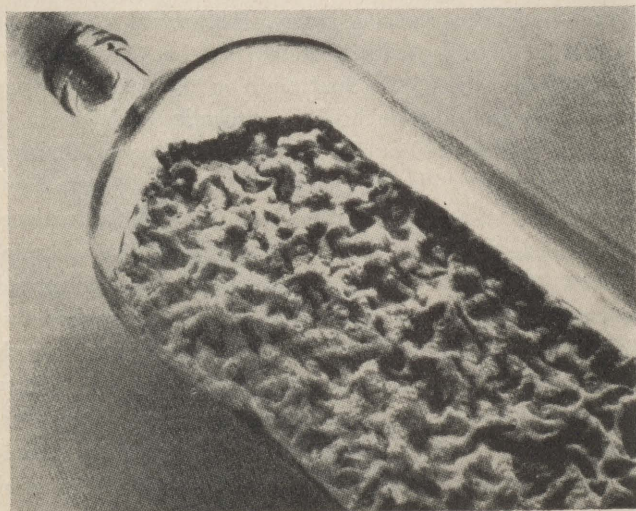
number of potent disease germs and a most important fact — penicillin is not harmful to the human body even at concentrations considerably higher than those needed for disease treatment. Already hundreds of lives have been saved in cases almost certain to have been fatal without the use of penicillin. Diseases where the deadly *Streptococcus* or *Staphylococcus* germs get into the blood stream, certain bone infections, pneumonia, gas-gangrene, various sinus infections and gonorrhea have yielded in severe cases to penicillin treatment, while its use against syphilis is being hopefully explored. Another possibility that must be investigated if penicillin becomes cheap enough is its use against the dairyman's scourge — mastitis: will this waster of our finest dairy stock meet its master in penicillin?

How it is obtained

In its purified form penicillin is a pale yellow powder, but this powder is obtained only under very carefully controlled conditions, followed by a prolonged and expensive method of extraction and purification.

The fungus that produces penicillin looks very much like the green mold found commonly on rotting fruits, but there are many "strains" of *Penicillium notatum*, only a few of which will produce a worthwhile amount of penicillin. These strains must be selected by careful testing, but the fungus is not co-operative because it very easily undergoes changes and the changed forms may be useless as penicillin producers. The fungus is very "fussy" about its food supply, too. The food commonly used is a mixture of milk-sugar and certain minerals in broth form. Commonly, a substance called "corn steep liquor", a by-product of corn-starch manufacture, is added to the broth. This material contains something, as yet unknown, which seems to act like a vitamin in stimulating production of penicillin. Search for other products to stimulate penicillin formation is progressing. Certain impurities in the medium such as copper may easily destroy the yield.

Commercial producers of penicillin favour the "deep-vat" method of growing the fungus. Spores of the fungus are added to the sterilized broth in large vats, some with a capacity of 30,000 gallons, and large quantities of germ-free air are pumped through the broth. At this stage all germs must be kept from the broth, otherwise any contaminating germ is able to destroy the penicillin as it is being produced or perhaps prevent its formation. Some producers grow the mold on moist bran, others grow it on broth in bottles resembling quart milk bottles. Each method requires a different strain of *Penicillium*. After a few days (varying with the method) the culture has formed its maximum amount of penicillin. The fungus is then filtered off, the liquid remaining is made acid, a solvent called amyl acetate is added and this dissolves the penicillin. The amyl



A culture of *Penicillium notatum* growing in a glass bottle

acetate is separated from the rest of the liquid by high speed centrifuging. An alkaline watery solution is then added to the amyl acetate containing the penicillin. This makes the amyl acetate give up its penicillin to the water which is then placed in small vials, and is usually frozen by use of "dry-ice" and the frozen water removed by evaporation at very low pressure. The essentials of extraction are much the same whatever the means of production.

The penicillin obtained represents only a very few parts per million of the original culture broth. At present about twenty million dollars have been invested in penicillin plants in North America. When these are in full operation they can hope to produce a total of about 9 lbs. per day! That seems an incredibly small amount for such an investment, but it is the remarkable powers of the drug that make this production worthwhile. Penicillin is so potent that only very small amounts indeed are necessary for treatment. About 60 thousandths of a gram of penicillin is the amount needed for the treatments necessary to cure a stubborn case of gonorrhea. At current prices that would cost about five dollars. About \$35 would buy the amount necessary to cure severe septicaemia. At present penicillin is mostly reserved for military use where it will save thousands of lives, but its possibilities for civilian use, if the price can be fairly controlled, are so encouraging as to warrant a vision of a new era of human therapy, for it is not likely that penicillin is the only natural antibacterial substance which will be made available nor even the best and a succession of such substances each capable of attacking a particular group of disease germs seems a reasonable possibility for the future if funds are made available in peace-time as they were in war to conduct the necessary painstaking research.

DDT

by B. Leslie Emslie

In a new book on Tolstoy, author of "War and Peace", the biographer describes creepily the pestiferous conditions existing in Russia at the time of Tolstoy's birth in 1828. Even the landed gentry tolerated the lack of sanitary provisions. If a visitor remained for the night, a servant was put in the spare bed first, not to warm it for the favoured guest but to feed the bugs which, being thus gorged and sated, would be expected to leave the visitor in comparative peace.

There is a modern twist to this tale. A coolie, clad in shirt and shorts, laid him down voluntarily in a bug-infested bed. Was he eaten alive? No, not a bit of him; this was a case of the tables being turned and the biter bitten. By morning not a single bug survived. To what remarkable cause could this unnatural result be attributed? Simply that

the man's clothing has been treated with a solution containing the most potent insecticide known to modern science.

The name of the substance, formidable enough in itself, is dichlor-diphenyl-trichlorethane, abbreviated for common usage into DDT or Gerasol. Like many now popular pest control products, DDT is not new, having been prepared by a German chemist about 70 years ago. But its value as an insecticide is a recent discovery, and the use of DDT for this purpose is protected by a Swiss patent.

While deadly to insects, DDT is non-toxic to man and beast. Sprayed in dilute solution on a screen door, it will kill any fly that alights thereon during the next thirty days. DDT is not a repellent; therefore, all the surer of making a kill. The walls of a cowstable were treated with DDT solution and the cows with an ordinary fly spray. The flies, thus repelled from the cows, lit on the walls and died.

Many instances of the successful use of DDT against various insect pests of various kinds have been recorded. Unfortunately, it seems to be no respecter of bees; consequently, its use against pests in the orchard may have some limitations, especially in blossom time. Some claim, however, that bees are less susceptible than other insects to the effects of DDT. This feature is being studied by investigators.

DDT is being produced on a small scale in the U.S.A. Meantime nearly all available supplies are required for the preparation of delousing powders for the armed forces. DDT is undoubtedly destined to play an important rôle as the chief active principle of many agricultural dusts and sprays. It is possible that for this purpose some may be available for restricted use in Canada by 1945.

A new flea beetle dust of British manufacture bids fair to rival the effects of DDT under certain conditions. It is known at present by the mysterious number 666. For both, in war and peace, a brilliant future is predicted.

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DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec

Department of Agriculture

Departmental Policies—Continued

Information and Research Service

Division of Entomology

This Division administers the Plant Protection Act as it applies to corn borer, pea moth and apple maggot. It is compulsory to destroy all corn remnants in the spring to hold corn borer in check; special apple maggot sprays must be made and remnants of the pea crop in Gaspé must be destroyed as a control measure for the pea moth.

At the four entomological stations at St. Martin, St. Thomas de Joliette, Frelighsburg and the Isle of Orleans, experiments are underway to discover best control measures for insects attacking small fruits, vegetables, tobacco and tree fruits. From these laboratories, located in the heart of the producing areas, information and advice can be quickly passed on to the growers of the region and prompt action can be taken in case of emergency.

Surveys and inspections are being constantly carried out as a result of which timely reminders about insect control can be passed on to farmers. As one example, prompt discovery of the presence in this province of the Mexican Bean Beetle has made possible the taking of control measures before the pest became firmly established. Nursery products are inspected before shipment so that no infected material can be distributed.

Information about insect control is sent out in a number of ways: through circulars, wall charts, post cards, newspaper articles and by radio. Short courses at agricultural schools bring this information to the attention of a large number of young farmers.

At the central laboratory at Quebec a permanent insect collection is maintained to which is added each year specimens of all insects collected throughout the province during that year. Collections sent in by Young Naturalists' Clubs are identified and demonstrations as to the proper mounting and classifying of insects are arranged. To supplement the teaching of entomology in the various agricultural schools, life-history and other charts are prepared, printed and distributed. A constant search through the literature on entomology keeps all information up to date, and a special effort is being made at the present time to study the distribution of insects which help spread virus diseases of potatoes.

Division of Noxious Weeds

It is estimated that weeds cause crop losses in Quebec amounting to fifteen million dollars. To control weeds, some two thousand inspectors are at work in 875 municipalities, seeing that the provisions of the Noxious Weeds Act are enforced. To adequately carry on this work, inspectors should be at work in 1600 municipalities.

One objective of this Division is the eradication of dodder, particularly in flax-growing districts where it is a real menace. This work involves the inspection each summer of about 30,000 acres of flax which must be done within a period of only six weeks. Seed cleaning centres are inspected each year to see that weed seeds are being properly removed from the seed. To learn something about the distribution of the principal weed species surveys must be made: this is essential to prevent further spread of bad species. To get some idea of the quality about 100 samples of seed, taken direct from the farmers' seed drills, are examined each spring.

The fight against weeds is carried on by medium of courses at agricultural schools, through the agricultural clubs and societies, by displays and demonstrations at fairs and exhibitions, etc. Co-operation of railways in cutting weeds along the right of way and of the Roads Department is sought.

Eight sprayers are in operation each summer and are able to spray 200 or 300 acres of grain to control mustard. As a public service around Three Rivers, Montreal, St. Eustache and Quebec, a sprayer is kept busy combatting poison ivy, and in other districts roadsides are sprayed to destroy weeds. Various sprays are tested at the central laboratory to determine their value as weed killers.

Special projects underway include eradication of dodder, purple loosestrife (which infests some 15 square miles of pasture in Baie du Febvre) and the elimination of weeds in cranberry bogs.

Division of Plant Pathology

The laboratory work of this division includes the identification of disease on specimens sent in for examination, and advice on control of the disease, once it is identified. Collections of specimens of diseased plants are maintained and are constantly being added to. Tests on germination of seeds are performed and seeds and bulbs are disinfected. Photographs, lantern slides and similar material are pre-

pared for use at agricultural courses, lectures, etc.

By frequent inspections and surveys constant watch is kept for any new disease that may make its appearance, or for signs of a possible epidemic of disease among cultivated crops. Studies are also made of the powers of resistance to disease of various varieties of crops.

Research on various diseases is underway with a view to determining the best methods of control. For example, the use of different fertilizers and other materials to control potato scab is one problem to which attention is being given, and many more could be cited, including work on apple diseases, which centres in the field laboratories at Frelighsburg.

The Division has found that the radio is a good medium for publicizing information concerning plant diseases, for on the whole farmers are slow to recognize disease symptoms and to apply the appropriate remedies. Courses given in the agricultural schools bring the need for control of plant diseases to the attention of young farmers, and refresher courses for the members of the agronomic staff of the Department of Agriculture keep them up to date on control measures. Frequent demonstrations and addresses to farmers' meetings keep the farming public informed on all phases of disease control.

Division of Publicity

It was a happy inspiration to combine the Division of Research, with its intimate knowledge of the problems, activities and achievements of the other Divisions of the Department of Agriculture, with that of Publicity, charged with the responsibility of keeping the public informed on the activities of the Department.

The Division of Publicity sees to the preparation, revision and printing of bulletins, circulars, reports, leaflets, etc., in collaboration with various services and authors. The purpose of these publications is to keep the farmer fully informed about the best modern practices in all phases of his operations. These publications are supplied free and most are available in either language.

Daily and weekly radio talks, interviews, etc., are prepared and broadcast. Some of these programmes are of general, and some are of purely local interest. This is a splendid way of giving out information which is of particularly timely importance.

Press releases to newspapers and farm journals, with illustrations when possible, serve to keep the activities of the Department before the eyes of the public. In the scientific field, articles are prepared for publication in the professional and technical bulletins.

Finally, the Division receives and arranges to have replies sent to all requests for information, circulars, bulletins, etc., and all such requests are attended to promptly and effectively.

Research

The Division correlates all agricultural research done in the province, in order to avoid unnecessary duplication

of effort, and determines what problems should be studied. It effects a close collaboration between the Provincial Department and the Federal Department of Agriculture, the agricultural schools and colleges so that the research programme will be directed toward solving problems of most importance to Quebec farming. The results obtained from the research programme are passed on to the farmers by medium of the agronomes, for the whole object of agricultural research is to obtain information that will enable farmers to produce better crops more economically.

Extension Service

Division of Clubs and Societies

Farmers' Clubs: The Division gives an annual grant to the club of fifty cents per member up to a maximum of \$50.00, provided that each member subscribes one dollar and that the total membership fees be at least \$30.00. In addition, special grants are sometimes made to help the club carry out some special project. The club making application for this special grant must supply a list of its members and its programme of operation as well as a statement of income and expenditures.

Agricultural Societies: A grant is made to each society on the basis of \$4.00 per member up to a maximum varying from \$400 to \$800 depending on the kind of society involved, but 12% of the amount of the grant is withheld to be used for general purposes. To obtain the grant the society must take in at least \$100.00 in membership fees at the rate of \$2.00 per year per member. If there are more than the minimum number of members required to obtain the grant, an additional grant of \$2.00 per member, maximum \$200.00 may be given. Details of the operation of the society must be furnished.

This Division also operates the Merit Agricole competition through which the achievements of prominent farmers in this province are publicly recognized.

Junior Farmers' Division

The Department of Agriculture, through the medium of the above Division, is much interested in young farmers and gives all the encouragement possible to enable them to become good farmers. It organizes a junior division of the Merit Agricole, provides bursaries for study at agricultural schools, and awards bursaries and prizes for the successful completion of agricultural school courses.

To help young farmers become established on their own farms, grants of \$200.00 for the first year and \$120.00 for each of the next four years are offered. The recipient must show title to at least 25 acres of farm land in his own name and must agree to plan his farming operations according to the recommendations of officers of the Department.

In collaboration with the Department of Education courses in agricultural subjects are arranged during the summer for rural school teachers, school gardens are provided for and illustrative material is supplied to schools.

Splendid Fair at Lachute

Taken from every angle, the Lachute Spring Fair, held June 14 to 17, was the best ever. There were more exhibits, more exhibitors (many of them new), more spectators, more good quality stock, than ever before. Even the weather, which can usually be depended on to spoil at least one day of the fair, co-operated. The sun shone brightly all four days and the temperature was just about right.

The total of exhibitors was 133, forty more than last year. There were 170 head of Ayrshire cattle and 110 Holsteins, and the quality in both breeds was superior to that of any previous year. Ten of the Ayrshire exhibitors came from Ontario, and most of the Holsteins came from the Ottawa Valley.

Several changes in the arrangements of the grounds added to the ease of handling the show. A new show ring was arranged in front of the grandstand which provided a good view of the judging. The cattle ring was larger, but even its increased size was not enough to accommodate all the entries properly. Additional seats had been built at the cattle ring for the spectators but still more could have been used. Numerous other improvements, while perhaps not so conspicuous, added to the comfort of the visitors. The St. Jerome Military Band supplied music.

Space does not permit a complete listing of all the placings, but breeders from the Lachute district managed to more than hold their own against the outside competition.

Ayrshires

Bull championships: Senior and grand, Clifford Oswald with Willowhaugh Ranger; reserve, W. H. Coverdale, Portsmouth, Ont. with Lemoines Point Manifest; junior, J. H. Black with Willowhaugh Eisenhower; reserve, Erskine Rodger with Milles Roches Aspiration.

Female championships: Senior and grand, J. P. Bradley with Brookview Hazel 5th; reserve, Black with Brilliantine; junior, E. W. Ruddy, Pickering, with Annandale Dainty Maid; reserve, Bradley with Brookview Violet Again.

Holsteins

Bull championships: Senior and Grand, G. R. Gladu with Glenafton Acme Mercedes; reserve, D. A. McPhee with Spring Farm Sensation Pabst; junior, A. E. Garratt with Alta Vista Laddie Supreme; reserve, Gladu with Southview Fancy Cord.

Female championships: Senior and grand, F. W. Allman with Lyndwood Ruth Mercedes; reserve, Wilson Bros. with Belle Abberkerk Acme; junior, Jos. Vaillancourt with Goodyear Illmeracme Spottie; reserve, Gladu with Reinette Hilda Colantha.

Prizes for Canadians were all taken by Donat Roy of St. Jerome and Dr. G. R. McCall, Lachute, was the only exhibitor with Jerseys. Mrs. R. C. Stuart, Arundel, showed Shorthorns: McGibbon milking shorthorns and Dr. McCall Aberdeen Angus.

Horses

Clydesdales: The senior champion was shown by Coverdale, the junior and grand champion was shown by M. & D. Smith. A. T. Cleland had senior and grand champion mare and G. Watson, Leonard, Ont. had the junior champion.

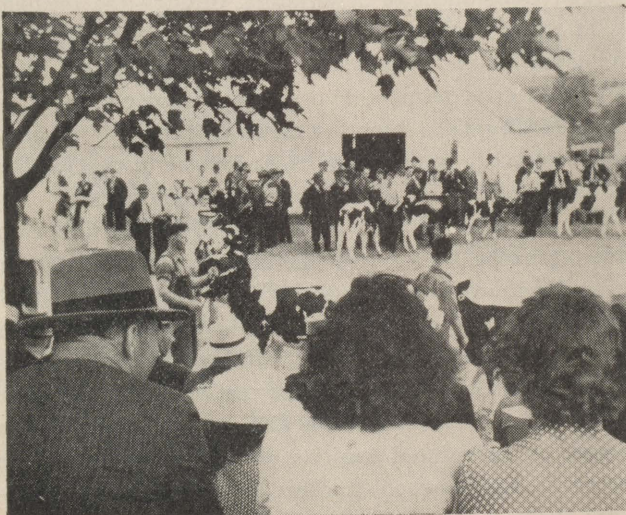
Belgians: Both grand champions were shown by the Budge Estate.

Percherons: Both championships in the regular classes went to Gilbert Arnold's entries.

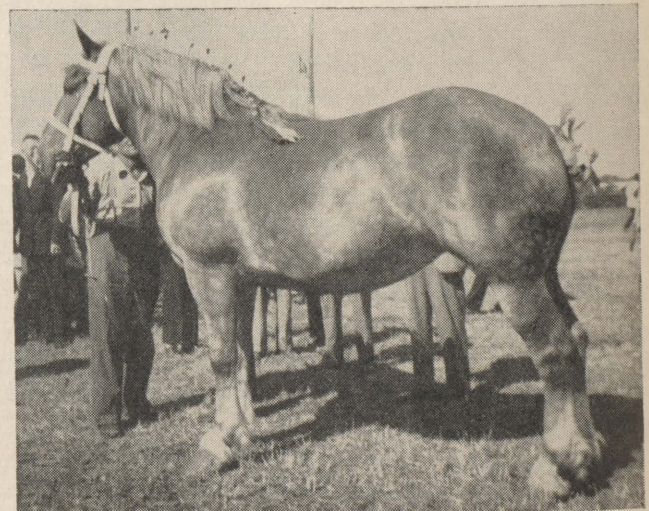
Sheep and swine

Cheviots and Shropshires were shown by Slack Bros. of Waterloo: A. Ayre of Hampton, Ont. had Cheviots and Southdowns, Cecil Acres had Hampshires and D. M. Stewart Shropshires and Oxfords.

Two herds of swine divided honours. They were Yorkshires shown by D. M. Stewart and Cecil Acres, both from Osgoode, Ont.



A class of Holstein heifer calves being judged



Hillmead Mary d'Or, Champion Belgian mare for Budge Estate

THE BURY CLUB FIELD DAY

On June 21, the farmers in the Bury district held a very successful Field Day. This was not, however, a Field Day in the usual sense. There was no ice cream or pop and only the grown-ups were present. About fifty of the most prominent farmers turned out to discuss beef farming conditions and post war prospects. The speakers for the occasion were Professors Hamilton, Raymond and Lattimer. Mr. N. G. Bennett in his capable way occupied the chair. In introducing the speakers, he emphasised that the purpose of the meeting was to consider seriously the best means of improving the farm practice so that the income of beef farmers may compare more favorably with other classes of farming and at the same time emphasized the importance of putting our farms in order now so that post war changes will have as little effect as possible on the industry of the district. Professor L. H. Hamilton was then asked to discuss beef farm organisation.

"We must be better farmers and diversify our practice to successfully compete with other branches of farming", declared the speaker. "This involves growing more and a greater variety of the feeds required, rotating crops and using intelligence in the use of artificial fertilizers. There has been a too common practice of depending upon purchased feed. With our newer varieties of early maturing

grains, crops can be grown successfully. This provides the necessary base for a livestock programme.

Many farmers of the district have shown an increasing tendency toward specialization in building up their herds. This has been due no doubt to scarcity of labour and machinery but it should be countered as much as possible since it has been shown in some places that for the highest returns up to 40 percent of the income should come from sources other than beef cattle. For the beef farmer, hogs, sheep, poultry, as well as cash crops, offer possibilities."

Professor L. C. Raymond dealt with pastures. He pointed out that experiments had been carried on farms in various districts in which artificial fertilizers had been tried with success. He emphasised the importance of studying each farm and field and establishing tests to discover the effect of rate of application and kind of fertilizer to use. This appeared to be the best way of re-establishing many of the worn out pastures. Making the greatest use of grass was one way of cutting production costs.

Dr. J. E. Lattimer discussed the present and post war position for the beef farmer. He stated that all far-off fields are not green, that we have a great need and a good market for better beef and he urged those present to continue improving their methods and the quality of the stock they were raising.

Sherbrooke Fair Plans Advance

Cattle classes for the Sherbrooke "Victory" Exhibition, August 26 to September 2nd, will be restricted to the twelve counties of the Eastern Townships for Ayrshire, Holstein, Jersey and Canadian breeds. Entries in the beef cattle classes will be open to the whole province, and the classes for Shorthorn, Hereford, and Angus will include all ages of breeding stock. Market cattle will, as in past years, be shown at the Fat Stock Show in the Fall.

For a number of years the breeding sections for the beef cattle were held at the time of the winter sale, but it is realized that many more people will be able to see these classes if they are held at the time of the Fall Fair. Furthermore, since there are no sections for the beef breeds at the Quebec Fair, the Quebec Department of Agriculture has asked the E.T.A.A. to put these classes on at the Sherbrooke Exhibition.

Meanwhile, preparations for the re-opening of the Fair are going ahead apace, now that the Army has moved out of the Fair buildings. New stalls are being built in the six cattle sheds and all the buildings are being repaired and painted. In the old administration building bunks are being installed for the young breeders who will be in Sherbrooke for the judging competitions.

This is the first Sherbrooke Exhibition since 1940 and

a record number of exhibitors and visitors is confidently expected. Remember the date — August 26 to September 2.

Lennoxville Field Day

A combination of two Farmers Clubs of the Ayers' Cliff vicinity held a picnic and field day at the Experimental Farm, Lennoxville on June 24th. The attendance was good and the tent provided came in useful on account of the weather. Rain, however, did not prevent inspection of the pasture experiments nor the running of some grass into the silo as a demonstration.

Speakers included the Superintendent, Mr. St. Marie and Mr. Richardson of the Experimental Farm staff, Mr. W. G. MacDougall, Mr. MacMillan, the representative of the Department of Agriculture for Stanstead County, and J. E. Lattimer of Macdonald College.

Mr. St. Marie stressed the need for improved pasture and hay crops in order to release more land for grain growing. Mr. Richardson gave the results of pasture fertilization experiments carried on at the farm. Mr. MacMillan pointed out the expansion of the cooperative shipment of live stock. Both Messrs. MacDougall and Lattimer spoke of the need for expansion of listening groups for Farm Forum Programmes. The subject of Prof. Lattimer's talk was "Some Supplementary Side-lines to Dairy Farming".

Dr. Georges Maheux Honoured

The staff of the Bureau of Information and Research gathered last month to honour their chief, Dr. Georges Maheux, who was recently elected a member of the Royal Society of Canada. Dr. Georges Gauthier, Director of the Plant Protection Service, organized the affair and Messrs. Omer Caron and Francois Fleury expressed, in a few well chosen words, the esteem and affection in which Dr. Maheux is held by his staff, following which presentations were made.

Dr. Maheux expressed his appreciation in his usual fluent and witty manner.

Some New Appointments

Gerard de Maisonneuve, B.S.A. (Oka), M.Sc. (Michigan), has been appointed horticulture specialist for the Montreal district.

Thomas Simard, L.S.A. (Oka), M.Sc. (McGill) has been appointed assistant plant pathologist in the Plant Protection Division.

He will devote his time chiefly to studies on diseases of cereal and forage crops.

J. R. Beaudry, L.S.A. (Oka), M.Sc. (McGill) has been appointed to the staff of the Field Husbandry Division.

M. Jacques Laliberte, B.S.A. (Oka) has been appointed to the Horticulture Service to carry on work in dehydration of vegetables.

Quebec Honey Producers' Co-operative

The annual meeting of this society was held in Montreal last month when operations for the year were reviewed. The co-operative has 188 shareholders, assets are \$25,036.90 and the reserve fund is \$12,685.91. The general financial situation is good.

Mr. Jules Methot, Chief of the Apiculture Section of the Department of Agriculture and M. Deschenes, Assistant Chief, spoke briefly, stressing among other things the importance of supporting the Canadian Beekeepers' Council, which has obtained subsidies from the Federal Government amounting to \$45,000.00 in favour of beekeepers who import packaged bees.

Officers for next year are: president, Hercule Lavoie; vice-president, O. Paradis; secretary-treasurer, J. A. Beaudoin; directors, Messrs. J. Rose, Hector Beland, B. Laplante.

New Appointment for J. B. Potvin

J. Bruno Potvin, formerly agronome in Bellechasse County, has been appointed head of the agricultural section of the Bureau of Information and Research at Quebec. He will be in charge of replying to all requests for information on agricultural matters which come in from Quebec farmers at the rate of 25,000 a year.

La Corporation des Agronomes Meets in Quebec

The annual meeting of La Corporation des Agronomes de la Province de Quebec was in progress at Quebec as this issue of the *Journal* was going to press. Consequently, summaries of the important talks given and a report of the meeting must be deferred until our next issue.

Apart from the general administrative meetings held during the Convention by the various committees of the Corporation, the delegates devoted most of their time to consideration of the position of Quebec agriculture during the post-war period, with particular emphasis on soil conservation and the dairy industry. In the first section, papers were given by Dr. Austin L. Patrick, Chief of the Soil Conservation Service for northeastern United States, R. Delisle of the Department of Lands and Forests, Quebec, and F. Godbout, Chief, Conservation Section, Quebec Department of Agriculture.

Prof. G. Toupin of Oka, S. J. Chagnon, Director of the Dairy School at St. Hyacinthe and Prof. J. E. Lattimer of Macdonald College spoke on the problems of the dairy industry.

New Order Sets Ceiling for Honey

The Prices Board has announced a new order, effective June 26, setting ceiling prices for honey and affording producers a higher return for No. 1 white honey than for the other grades.

The order divides Canada into two zones. Zone No. 2 takes in the low production area of British Columbia, the Maritimes and that part of Quebec east and north of the counties of Compton, Richmond, Drummond, Yamaska and Maskinonge, and north of the southern boundary of Abitibi county.

The remainder of Canada is in Zone 1. The maximum price at which any honey produced in Zone 1 may be sold at wholesale in bulk is 13 cents a pound for No. 1 white honey and 12 cents a pound for any other honey, F.O.B. the seller's shipping point.

Bulk honey produced in Zone 2 and sold at wholesale to a buyer in that zone can sell for one cent more to make the selling price approximately the same as the delivered price of shipments brought in from areas of heavier production of Zone 1.

Prices for honey packed in different-sized containers have been readjusted to cover more equitably the cost of containers and labor involved in packing.

No. 1 white honey price is set half a cent higher than last year's maximum price for non-pasteurized honey. In direct sales to consumers a producer is allowed the retailer's mark-up.

The order allows one and one-quarter cents per pound to processors to cover the cost of pasteurization and granulating. This allowance is not available for dark honey.

Finding Out How Canada Eats

by Margaret S. McCready

How many housewives know just how much food their families consume in one week and the total of protective food elements contained therein? Surveys conducted in the past few years have given us very useful material as to Canadian dietary habits but the data has been collected largely from city homes where the income has been at the low and moderate levels. The Department of Agriculture, Ottawa, is interested now in obtaining data in connection with food consumption in farm homes. The information will help greatly in arriving at farm production goals since when the results are checked against food intakes recommended for good health it will be evident how much more or less of certain types of essential foods needs to be produced.

Different methods of collecting the information are used. Already in one Ontario farm community housewives have co-operated in tabulating the food consumption of their families for a seven day period by recording at each meal the servings of each food used by each member of the family. The staff who analyze these records have then to use average food values for these servings.

Recently another method of collecting data has been tried with the co-operation of French speaking farmers in Ile Perrot, P.Q. In twenty farm homes out of approximately sixty-three on the island, records for one week's food intake have been kept. Surveyors from the School of Household Science, Macdonald College and the Department of Agriculture, Ottawa, were received with interest and some curiosity in these farm homes during June. Splendid co-operation in the project was obtained from the parish priest, the doctor in charge of the rural health unit, the local



One surveyor weighs the food, the other the family, much to the interest of the younger members

agronome, the Mayor of the island, the school teachers and above all from the very busy housewives. Unfortunately there was no Cercle Fermiere through which the survey could have been explained and aided.

To lighten the burden of the housewife, on the first day, food on hand was weighed and recorded by the surveyors. The same procedure was followed one week later when food left at the end was recorded. In between, the housewife was asked to write down daily any foods purchased or brought in from the farm or garden or as a gift. Daily record forms were provided for this. In addition, numbers of persons absent from meals or guests were noted as well as the outline of menus for the day.

No one doubts the added burden to the housewife in keeping such a record for one week. As these are collected in farm communities across Canada, however, a very useful social and economic document can be compiled. Not only will the material be valuable in helping our Government plan our needed food production but it will provide the information necessary for planning intelligent nutrition education for Canadians. The accompanying pictures show only two of the Ile Perrot farm homes where excellent co-operation was obtained.



Housewives co-operated by keeping records* of the food used during the week



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Nova Scotia Miners Put Back Pay Into Savings, Too

When the miners of Glace Bay and New Waterford, Nova Scotia, got their "back pay" in May, a sensational story of reckless spending and absenteeism was published across the country.

"Miners everywhere were incensed over the way their reputation as citizens was smeared before the Canadian public", says a recent article in the Maritime Co-operator which gives the facts as seen by a local correspondent and quotes the figures of savings made and taxes paid to show the other side of the picture.

The "back-time", awaited for months, amounted to \$143 per miner. Some of it had been spent in anticipation and much of it when received was spent by the women for needed articles for the miners' children: — durable shirts, shoes and dresses for Johnny and Mary.

"Like their wives, the men went about their back-time spending in unspectacular fashion," says the Co-Operator. The Glace Bay Town Hall took in \$35,000 that afternoon of May 13 in tax arrears, tax payment, light and power bills. For several days during the following week its staff was taxed to the utmost to take care of the steady stream of citizens who came to square off past and present accounts with the town. Bond sales through the banks, which remained open from 2 to 4 that Saturday afternoon, reached the highest point in the campaign.

Credit Union Deposits Boomed

Each of the credit unions in this area did the largest

business in its history. New Waterford Credit Union, the largest, received savings deposits on Saturday of \$20,000, Monday \$10,000, Tuesday \$3,800, a total of \$33,800 in three days. The officers expected that deposits would exceed \$45,000 before the end of the week. Glace Bay Central Credit Union took in \$2,200 Saturday evening, three times the usual amount; Coady Credit Union deposits were \$8,000, seven times the usual amount; Caledonia \$700, three times; Dominion Credit Union \$2,000, five times more than usual. Passchendaele \$300, seven times the usual amount.

The British Canadian Co-operative Society, Glace Bay, received \$7600 on accounts covered by share capital on Saturday afternoon and evening.

The Liquor Commission did a good business too, but this writer saw only one inebriate on the street, and police reported a quiet week-end. As for that, if the miners wished to celebrate the bonanza at home that was their own business.

Many papers made much of the absenteeism prior to and following the back-time payment, giving daily figures on idleness and lowered output. Some of the absenteeism was due to other causes. But a few days idleness without reason is understandable when it is remembered that to date the miners never have received a vacation, unless they took a day off now and then at their own expense."

Power in Ordinary People

Co-operatives rest upon the firm conviction that there are extraordinary powers in just ordinary people, and if we open the doors of opportunity through information and education, we can achieve extraordinary results towards a sounder and saner economy. In our political economy we have recognized the fact that there are extraordinary powers in ordinary people. If this were not so, democracy would be a meaningless word. Deny the validity of it in the economic realm—it is here where the Consumer Cooperative Movement comes into play—and we must also deny it in the political realm. Because we have not always made the most effective use of democracy is no reason to deny its potentialities. Of course, there are those who contend that it cannot be made to function and that it becomes the responsibility of political and economic superminds to plan for the people their socio-economic and political life. This is a dangerous concept, for it is the initial step towards economic and political

dictatorship, even if it should be partially prompted by humanitarian aims.

Democracy is not easy of achievement. In order to function properly it must be rooted in the hearts and souls of man. Unlike dictatorship, it cannot be super-imposed from without.

For exactly the same reason the Cooperative Movement cannot be superimposed from without. Oh, yes, it is quite possible to evolve going business institutions on a quasi-Cooperative basis. But if they are not built upon an inner conviction by the individual of their fundamentally democratic and humanitarian character—they will lose their opportunity of helping to lift mankind to that higher economic and social level about which we have become so greatly concerned in recent years.

—from *Credit Union Co-ops:
Their Purpose and Use.*

Market Comments

Excellent crop prospects are again mentioned in the second report covering the Dominion as a whole issued June 20th. The outstanding exception at that date was the need for rain in Quebec. Since that date generous rains in the province have relieved the situation and brightened prospects generally.

The moisture situation in western Canada as at June 20th was a total rainfall from April 1st to that date of two inches above normal in Manitoba, an inch and a half above normal in Saskatchewan and half an inch in Alberta. It appears that 1944 is likely to provide a much above average grain crop. This is indeed fortunate as the numbers of live stock now on hand make feed supplies specially necessary.

The rains came too late to save the strawberries particularly in the Montreal district. This crop is particularly susceptible to weather conditions. In 1943 the yield for all Canada was about two-thirds of the 1941 volume. The value of the crop was over a million dollars more owing to the unit price being more than twice as high.

The most important change in prices during the month was in increase in the price of cattle. This was general in all classes and reflects somewhat lighter runs as well as the usual trend at this season of the year.

Trend of Prices

	June 1943	May 1944	June 1944
LIVE STOCK:	\$	\$	\$
Steers, good, per cwt.	12.95	12.40	12.70
Cows, good, per cwt.	10.25	9.40	9.70
Cows, common, per cwt.	8.53	7.29	7.50
Canners and Cutters, per cwt.	6.50	5.87	6.05
Veal, good and choice, per cwt.	15.00	12.27	14.17
Veal, common, per cwt.	12.85	8.33	9.25
Lambs, good, per cwt.	19.50		15.00
Lambs, common, per cwt.		8.33	11.17
Bacon hogs, dressed, B. 1, per cwt.	17.10	17.25	17.25
ANIMAL PRODUCTS:			
Butter, per lb.	0.33	0.34	0.33
Cheese, per lb.	0.23	0.21	0.21
Eggs, Grade A large, per doz.	0.36½	0.35½	0.35½
Chickens, live, 5 lb. plus, per lb.	0.30	0.28	0.27¾
Chickens, dressed, milk fed, A per lb.	0.35½	0.35½	0.37½
FRUITS AND VEGETABLES:			
Apples, B. C. Winesaps, per box	5.00-6.00	4.04-4.08	4.00
Potatoes, Quebec No. 1, per 75 lb. bag	2.20	1.25-1.50	1.25-1.60
FEED:			
Bran, per ton	29.00	29.00	29.00

Working people are the farmers best customers. The first thing that people within average incomes do when they get more wages is to spend more money for food.

According to the U.S. Department of Labour: (1938)
Families with incomes of \$1000 spend \$397 for food.
Families with incomes of \$2000 spend \$668 for food.
Families with incomes of \$3000 spend \$813 for food.

Co-Ops Meet Wartime Tests

Farmers' cooperatives are economic democracies, representing the pooling of individual capital, and providing for the registering of member opinions on management and services at regular intervals. To make intelligent, constructive contributions, the membership must be fully informed along lines that affect the business. War has increased the difficulties of membership contact.

To avoid having their leadership operate in a vacuum without membership participation, cooperative associations have encouraged local neighbourhood discussion groups; used more delegate meetings instead of membership meetings; provided more detailed reports and financial statements; issued more information by mail; employed more radio time; and added staff members to regularly contact local groups for discussion purposes. Even under war strains, cooperatives have thus been able to continue their democratic controls, to meet internal wartime problems effectively, and at the same time to strengthen their services.

Subsidies to Agriculture

According to the Economic Analyst, published by the Dominion Department of Agriculture, a total of almost \$77 million was paid out by the Department in subsidies and bonuses in connection with agricultural production, during the year 1943. The chief items were \$31 millions for wheat acreage reduction, \$15,700,000 for butterfat subsidy, and \$15,900,000 on feed freight assistance.

The complete list of items is as follows, the statement being subject to revision:

Fluid Milk	\$ 4,968,477
Butterfat	15,724,815
Concentrated Milk	464,955
Milk — Cheddar Cheese	800,270
Cheese — Bonus on Quality	1,385,948
Cheese Factory Improvement	73,142
Fertilizer Subventions	860,742
Lime Subsidy	38,715
Feed Freight Assistance	15,940,883
Alfalfa Meal	37,750
Feed Wheat Drawback	2,233,466
Feed Assistance Plan B	1,217,453
Sugar Beet Pulp	25,829
Wheat Acreage Reduction	31,017,799
Prairie Farm Assistance	806,474
Prairie Farm Income	67,275
Canning Crops	933,677
Berries for Jam	200,000
Wool	90,187

Credit Unions in Ontario

There are now 163 co-operative credit unions under charter in the province of Ontario. More than 140 of these have been organized in the last four years. Some 43 were organized in 1943. Total membership in all credit unions in Ontario is now 32,672, with total assets at \$3,483,789.50.

Pithy Pickings

by F. S. Thatcher

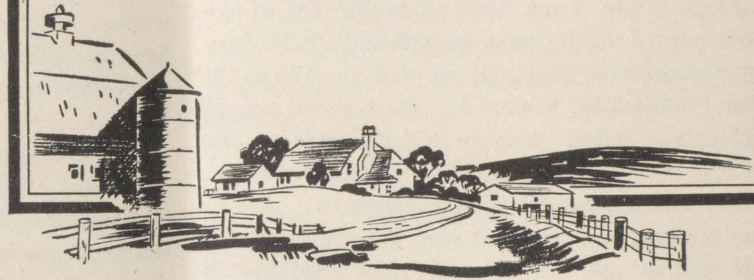
Cooperative dairy breeding associations in the United States have in service approximately 2,000 sires, of which about 1,400 are in bull associations and about 600 in artificial breeding co-ops. Records of the Dairy Herd Improvement Association show that approximately 10 percent of the bull association sires and 23 percent of the artificial breeding sires are proved sires whose daughters produce on the average more than their dams.

Advances of interest to dairymen recently made public by the U.S. Bureau of Dairy Industry include:—

- (1) Cheddar cheese may be ripened in half its normal time by using special starter cultures which permit a storage temperature of 60°F.
- (2) A new method of dehydrating cheese makes a palatable product with a saving of 35 per cent in weight and 45 per cent in shipping space.
- (3) Packaging dried whole milk in nitrogen gas greatly prolongs its keeping quality.
- (4) Riboflavin, the vitamin most lacking in the average diet can be obtained in suitable concentration for enriching bread from cheese whey. The natural riboflavin content of whey can be greatly increased by the action of certain bacteria.
- (5) There is a vitamin present in milk which is not yet on the identified list. The same vitamin is present in alfalfa or timothy hay but not in wheat or corn.
- (6) Most encouraging results have been obtained in the control of mastitis by injections of sulpha drugs contained in oil.
- (7) Almost any cheese factory could improve the quality of its output by grading all its milk for quality and by pasteurization.

Recent analyses in the northern U.S. indicate a trend from general production of potatoes on scattered farms to con-

LOANS to FARMERS FOR SEASONAL PURPOSES,



When you require ready cash for the purchase of seed, fertilizer, livestock, farm equipment and other legitimate purposes call at your local branch of The Royal Bank of Canada. The Manager will be glad to discuss a loan with you and explain the simple terms under which it can be made and the convenient arrangements available for repayment.

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centrated commercial production using modern methods and large-scale machinery. High yields are a feature of such production, which suggests an opportunity, possibly even a need, for co-operative development in Canada in order to retain an export market for high quality stock.

Co-op wholesales "building from the ground up" now have the makings of a

roof over their head with the purchase — by National Cooperatives, Inc. — of a \$250,000 shingle mill on Vancouver Island, British Columbia. The mill is located in the heart of the best red cedar stands in the northwest, and its production will go to the 16 midwestern and Canadian members of the group. Two other factories, the Universal Milking Machine Co. and a cosmetics factory, also are owned by the co-op.

One curious effect of the robot 'plane attacks has been a sharp decline in Britain's dairy production. The cows leap to their feet and race crazily around their pasture at the first sound of the new weapon, whereas they had learned to ignore the usual bombing raids and gunfire.

The time is now approaching when encephalomyelitis — the sleeping sickness of horses — usually occurs. Early vaccination by a qualified veterinarian is the best preventive. The Veterinary Director General of Canada points out that farmers should be prepared to act promptly if the disease makes its appearance in their district or in any neighbouring territory. In districts where the disease appeared last year, the owners of valuable pure-bred animals would be well advised to have them vaccinated as a precautionary measure. Sleeping sickness in horses may infect man with a similar type of disease.

Since 1941 the total number of live-stock on Canadian farms has increased by about one-third. Notable increases are: hens and chickens 14,000,000; hogs 3,000,000; cattle 1,250,000. During the last crop year 433,000,000 bushels of oats were fed to Canadian live stock and poultry; barley 146,000,000 and wheat 94,000,000 bushels.

A farmer needs no permit to sell meat slaughtered by or for him to another farmer or to a consumer. But to sell meat to retailers, hotels, institutions, and other such places, he must obtain a slaughtering permit, and observe the regulations of the Wartime Prices and Trade Board regarding meat stamping.

No specific permit is required for a farmer using his own truck to transport milk and cream produced on his own farm, but such permit is necessary to truck unprocessed and unbottled milk or cream produced on any other person's farm.

Britain's people have been urged to add potato meal to flour because of the need to conserve bread.

Great Britain has devised a method of killing weevils in grain by using a very fine inert dust. This causes the weevils to dry out.

Artificial insemination is being used in England to build up high-grade poultry flocks. The semen from one discharge of a rooster will be sufficient to fertilise from twenty to forty hens.

Cooking vegetables in hard water saves or increases the amount of available calcium which is very important in the development and health of teeth.

A farmer producing 25 baby beeves annually will find a good pure-bred bull worth \$185 more per year than a scrub sire (1943 prices), according to a recent S. Dakota investigation.

Of the world's more than two billion people, nearly two-thirds even in normal times have never had enough of the right kinds of food for health and decent living.

The need has been stressed for intending potato growers to be most careful in finding out whether the soil available is of the type best suitable for potato culture before going into commercial production.

Bees last year provided Canada with about 32,500,000 lbs. of honey, second largest output in the country's history and 35 percent over the 1942 production.

The big increase in beeswax also helped to boost Canada's war production. This beeswax is used in the building of Corvettes, manufacture of parachutes, and in the protective coverings for fighter planes. Other war uses include the making of adhesive tape for sealing shells and the waterproofing of shells, belts, coils and machinery. Large quantities also are used in war plants for waxing cables and pulleys and for improved insulation. Over 750,000 lbs. of beeswax were required for Canada's war output in 1943, without any account taken of civilian uses. Canadian supply was not sufficient to fill this demand.

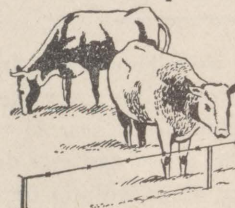
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MC-2

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It is too bad that the Provincial Department of Agriculture is so backward about coming forward with an assistance policy for artificial insemination clubs. This seems particularly strange when election nears, for new policies and promises are usually released wholesale at such a time. We understand the Federal Department is ready to give a great deal of aid to this important means of improving our dairy herds but they do not act in provinces where the local authorities have no definite policy. It is high time this method for large-scale increase in the production possibilities of our dairy cattle was put to greater use. Used sooner it might have enabled the dairy-men to make an even greater contribution to the war effort, perhaps even to the extent of making butter rationing unnecessary. Post-war days may see an even greater demand for dairy products but increased production should be accompanied by reduced production costs. With a farmer-premier Quebec farmers ought to get action.

Stanley heard us talking about last year's flood and is one of the few people hoping for its repetition this year. However, the date of its arrival last year did find a great many of us wishing for a portion of the rain we got then. Things were just as dry as they were wet last year. Our immediate vicinity was particularly dry and we had seen rain falling all around us. Last year in haying we enjoyed a spell of such weather but when the hay is growing (or should be) it is not appreciated. One of the neighbours expressed the opinion that it was too late now for a good crop but it has rained and considerable recovery is still possible.

Our own hay looks fairly well since it was all top-dressed by hand and, as usual, that meant a pretty heavy application. Pastures, though, look like the last of a dry August. We did get a small piece plowed, well fertilized and seeded to oats as a step towards improved pasture. I don't know how much it will grow but it certainly can't be any less

STRIPPINGS

by Gordon W. Geddes

than was growing there before. It is amazing how fast brush and moss will spread when the land is in poor condition. Poplars are terrible for the roots will run for long distances with a sprout every few feet. Hardhack is still our worst pasture weed though. The section where we mowed, raked and burnt it last August certainly looks much better. But the intention to fertilize part of it for a test was never realized. There seemed to be too many intentions for the number of hours in a day.

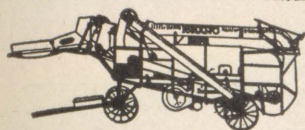
But we will certainly have to do more than mow the hardhack to get real pasture on that field. We have rather lost faith in the mere application of fertilizer as a practical method but would have liked to try a little. We did get it on the calf pasture where we figured that cost did not matter if we could only get the grass since it is the only spot suitably located for that purpose. Results with the calves convinced us that a pasture near the barn is good for them. This was a section of meadow still in fair condition. Last fall and the year before it was manured with 300 lbs. per acre of 0-14-7 fertilizer applied. This spring 400 lbs. per acre of 2-12-4 was put on. Growth is still not up to the desired level though there is much improvement in spite of the dry weather. Wild white clover is coming in. But it makes it seem like an expensive way to improve pastures which are really worn out and moss-covered.

It also looks as if our co-operative creamery project would be moss-covered too, before we got the green light to go ahead from the provincial government. The local representative seemed to think we had a good opportunity but the weeks keep slipping by since the application went in and we hear nothing from them. Meanwhile, the period of high production and best profit is also slipping by.

We had a bad case of porcine indigestion to deal with. One of the pigs was suddenly down flat and couldn't get up even with assistance. This was new to us so I phoned the vet. He labelled it indigestion and prescribed plenty of salts. It certainly did take a lot for three days but the patient is improving now and is quite active. I had been feeding barley meal with plenty of skim milk for a few days while I was rushed with work. I blamed the barley but the vet blamed it on the fact that the milk was not soured before feeding. We have never made a practice of souring and have had little trouble, though he thought we had been lucky. But a farmer deserves a little luck of the good variety once in a while.

Reports Good Farmer Co-operation in Nova Scotia

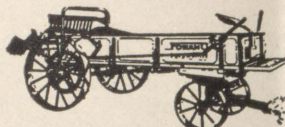
A story of good co-operation among farmers comes from Cheverie, Hants County. At a recent meeting of the Cheverie Agricultural Society, as reported by Charles Douglas, Hants County Agricultural Representative, there was some discussion about bringing into the district a few carloads of feed for cattle. Following this discussion one of the members asked now that they had dealt with the feed for the stock how about bringing in some potatoes for themselves as the potato crop there had been almost a total failure. A survey was made of the members present and around 200 bushels of potatoes were ordered. The work of buying the potatoes and taking care of additional orders was placed in the hands of a committee. A short while later three truckloads consisting of 450 bushels were brought in from the adjoining county of Kings. The shipments were handled through the Agricultural Society and financing was done, in part, by the local credit union. Through the efforts put forth at the meeting of the Agricultural Society the district is now fairly well supplied with potatoes.

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ARE RELIABLE****ALL-STEEL THRESHER**

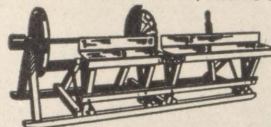
The Forano All-Steel Thresher is our pride, particularly good performance, quality and quantity; secondly, because it is a well built machine; thirdly, because it has a good appearance.

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Forano Root Cutter can be driven by hand or motor. It is roller bearing mounted, rendering it easy to operate.

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The Forano light weight and light draft Manure Spreader, with a capacity of 40 to 45 bushels, has a wide reputation for its performance with two medium weight horses. Maintenance cost is very low with a Forano Spreader.

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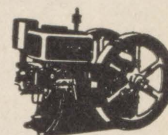
Buy a Forano Cordwood Saw Frame. It is simple — heavy — well made and will last a lifetime.

**QUEBEC THRESHER**

The Forano-Quebec Thresher is a well known machine, long appreciated for its simplicity, performance and low price; characterized by a patented screen made in two inversely operating parts — the only machine of its kind.

MOTOR

The stationary Gasoline Engine is gradually regaining the confidence of the farmers because time has proved that slow speed stationary engines last a lifetime without trouble. The Forano is an old timer still on the job.

**THE PLESSISVILLE FOUNDRY****PLESSISVILLE P.Q. CANADA***Makers of FORANO Products since 1873*

Results of a 20-year study in S. Dakota of the effects of depth of plowing on crop yields show:—

- (1) The total yield of crops was least where plowing was shallowest — 4 inches.
- (2) Corn and wheat yields increased with depth of plowing up to a maximum yield for 8 inches.
- (3) Legume yield increased to a maximum at 10 inches.

A new insecticide has been discovered known by the code letters DDT which when sprayed in a five per cent solution in kerosene on the interior walls of stables, barns and other buildings remains effective as a fly killer for several weeks. At present this is only available for military use in protecting the armed forces overseas from disease-carrying insects of various kinds. After the war it will be a valuable addition to the civilian's armory of weapons in the fight against the insects.

Inoculating the seed of peas or garden beans with the appropriate legume culture is profitable. (This culture contains bacteria which grow on the roots of legumes and enrich both the plant and the soil with available nitrogen).

Handy Recipes for Farm Whitewash

Here are several recipes for making whitewashes of various kinds for farm buildings. A rainproof whitewash for the outside of buildings is made by slaking 62 lb. of quicklime in 10 gallons of hot water, and then adding 2 lb. of salt and 1 lb. of zinc sulphate which have been previously dissolved in 2 gallons of water. Two gallons of skim-milk are also added to the mixture. The addition of one ounce of alum improves the whitewash but it is not necessary. To prevent rust, the salt is omitted when metal has to be whitewashed.

An effective disinfectant whitewash is made by dissolving 50 lb. of lime in 8 gallons of boiling water; then add 6 gallons of hot water which has 10 lb. of alum and one lb. of salt dissolved in it. Add a can of lye to every 25 gallons of the mixture. Also add one lb. of cement to every 3 gallons, and stir thoroughly. A quart of creosote disinfectant may be used instead of the lye, but lye is to be preferred when the colour is to be kept white.

Another whitewash in smaller volume may be made as follows: into a large clean tub put one bushel of lump lime and slake it with boiling water, covering it during the process to keep in the steam. Strain the liquid through a fine

sieve, then add 3 lb. of commercial sulphate of zinc, 1 lb. of alum, and 2 lb. of common salt, the alum and the salt having been previously dissolved in hot water.

Another standard recipe is — Slake one-half bushel of lump lime with boiling water in a barrel; strain, and add one quarter-peck of salt dissolved in warm water, 3½ lb. of flour made into a thin paste with boiling water, and one quarter-peck of salt dissolved in warm water. It is recommended that this whitewash be applied hot.

\$20,000, the highest price for a Holstein cow paid in N. America since 1920 was paid for Montvic Bonheur Pietje, B., a cow bred by Mount Victoria Farms, Hudson Heights, Que., but sold by them in 1942 for \$6,500.

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THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Quebec Institutes in Thirtieth Annual Convention

Macdonald College, in its environment of summer perfection and beauty, was the scene of the thirtieth annual Convention of Quebec Women's Institutes. The privilege of meeting year after year at the College in their annual conventions has been a great factor in maintaining the interest of the membership, and is one which is eagerly anticipated and prepared for, as well as remembered by all who have enjoyed it.

The hearty welcome accorded by Lt. Col. W. H. Brittain, when, on the morning of June 28, Convention opened, was in keeping with the spirit of hospitality with which the delegates had been met. Dr. Brittain had sometimes wondered, he said, at the spirit of vitality of Women's Institute in their Conventions, and this he had come to ascribe to their interest in their manifold activities, and urged the members to see that it was maintained.

A new concept of the real object of Education was needed, Dr. Brittain believed, which should be not so much to liberate thinking as to control it. The speaker commended the Women's Institutes for placing education in the forefront of their programme.

Reply to Welcome

Miss Alice Dresser, Vice-President of Q.W.I. replied to the welcome in words expressing the deep appreciation of the hospitality which had been given the W.I. from the College for more than thirty years.

Following is the list of Provincial officers and Directors of Q.W.I. for the coming year.

Provincial Executive Officers

Hon. President, Mrs. C. E. Dow, Port Daniel West, Que.; President, Mrs. W. C. Smallman, St. Agnes de Dundee, Que.; First Vice-Pres., Miss Alice Dresser, Richmond, Que.; Second Vice-Pres., Mrs. R. Thomson, Abbotsford, Que.; Secretary, Mrs. A. E. Abercrombie, Lennoxville, Que.; Treasurer, Miss Abbie Pritchard, Wyman, Que.

Provincial Directors

Agriculture, Mrs. H. C. Yates, Stanbridge East, Que.; Home Economics, Miss M. L. Kezar, Ayer's Cliff, Que.; Welfare and Health, Mrs. Grant LeBaron, North Hatley, Que.; Education, Mrs. Russell Patterson, Mille Isles, Que.; National and International Relations, Mrs. W. G. Kurhing, 4323 Montrose Ave., Westmount; Publicity, Mrs. M. E. McCurdy, Lennoxville, Que.; War Services, Mrs. Howard Smith, Loretteville, Que.; Representatives—F.W.I.C.: Mrs. C. E. Petch, Mrs. W. C. Smallman; Representatives—A.C.

W.W.: Mrs. R. V. MacKenzie, London, Eng.; Girl Guides, Mrs. Falconer, Hudson, Que.; Nutrition, Mrs. W. R. Beattie, Inverness.

Board Findings of Interest to the Province

The Provincial Board of officers and directors met on June 27, following an informal meeting on the previous evening. In addition to a long agenda on routine business several interesting facts became known. Among these was a letter of thanks from Australia for garden seeds sent by Q.W.I., which the writer said, made "a bit of Canada in Australia".

The Past Provincial President of Q.W.I. is to be recognized as having the right to a seat on the Board of Directors during the term of office of her successor.

The MacFarlane Memorial Scholarship was awarded for the past year to Miss Helen Crook of Ayer's Cliff.

Discussion on travelling expenses resulted in a motion to the effect that each Branch be asked for the sum of \$1.00 to be sent to the Provincial treasurer to assist in defraying these expenses.

The National War Finance Committee reported that rural children have contributed the sum of twenty thousand dollars to the funds.

It was decided on motion that Branch publicity reports are in future to be sent to the Provincial Director of Publicity Mrs. M. E. McCurdy, Lennoxville, instead of to County Conveners as formerly.

Visitors

Miss Champoux, Organizer of the Cercles des Fermières, visited the Board, and explained the workings of her society.

Mrs. Alfred Watt, President of the A.C.W.W., was present at Board sessions and briefly addressed the members.

Mrs. C. E. Dow, President of the F.W.I.C. attended Convention and gave good advice and assistance from her long experience in W.I. work.

Greetings were sent to Saskatchewan, where the annual Provincial Convention was being held concurrently with Q.W.I.

The work of the committee on the revision of the Hand Book of the Q.W.I. was pronounced completed and ready for the printer at the close of Convention. The thanks of the Board were expressed to the Committee, which included Miss A. Dresser, Mrs. A. E. Abercrombie and Mrs. M. E. McCurdy.



The Provincial Board of the Q.W.I., photographed at Macdonald College on June 27th.

Q.W.I. Notes

Mrs. Dow on Publicity

Mrs. C. E. Dow, President of the F.W.I.C. also finds time in her busy life for local work and is County Convener of Publicity for Bonaventure. The following extract from her annual report gives valuable suggestions to other Conveners of this department for the carrying on of their work.

"Your Convener believes that this report does not show a satisfactory picture of the work accomplished by the Institutes in this County. She feels that apathy in publicising what the branches are doing — even if it is only that a meeting was held and when and where — is partly responsible for the lack of interest shown among our members.

Three recommendations are therefore made. (1) Appoint an alive, active Convener of Publicity; (2) At every meeting see that she is reminded to have a report of it in the hands of the County Convener within two days; (3) That in the unavoidable absence of the Publicity Convener, the Secretary shall immediately send her a summary of the Minutes.

If these recommendations are adopted and still there is no publicity, the blame may then be surely placed upon the County Convener of Publicity."

Argenteuil County.

Brownsburg. — An illustrated lecture given by Mr. Oliver of the Dominion Experimental Farm, Ottawa, showing ways of improving lawns by planting of suitable shrubs, flowers, etc.

Jerusalem and Bethany. — Uses of the Soya Bean discussed. Slips and bulbs exchanged. Mr. A. Ogilvie spoke on fertilizer for the flower and vegetable garden.

Mille Isles held a plant, root and slip exchange. Papers on Victory Gardening were read.

Morin Heights welcomed two new members — Mrs. H. Lacken and Mrs. A. Scott. Mrs. Rogers read a paper telling how a net made from human blood helps to remove kidney stones. A musical questionnaire was held, also exchange of seeds, slips and bulbs. \$22.40 was realised at a Military Whist.

Pioneer heard a paper read by Mrs. Matthews on preparing land for gardening, garden tools, transplanting and the cold frame.

Lachute. — Recipes and the uses of the Soya Bean were given in an article by Mrs. G. Dobbie.

Upper Lachute and East End. — Title of paper read by Mrs. J. Robertson was "Care of the Grapevine". Articles were read on the cultivation of cucumbers and hardy perennials.

All branches were well represented at the Convention held in the Lachute High School, Mrs. W. C. Smallman and Miss B. Fletcher being guest speakers.

Brownsburg Branch had a lecture on electricity and its cost in rural sections by Mrs. A. Dixon. Plans were made for an exhibit of handicrafts at the Spring Fair.

Bonaventure County.

Reports a successful County Convention at New Richmond. Sunshine bags were distributed as a means of raising funds, and school prizes offered to be given in September. Balanced menus were discussed in a paper, and the growing of flax described. An exhibit of aprons and favorite pieces of china was a feature of the meeting.

Chateauguay-Huntingdon Counties.

Dundee Branch gave an additional \$10 to Huntingdon County Hospital. An address by Rev. W. S. Hatcher featured the programme, his topic, "The Changing and the Unchanging", dealing with things present, past and future,

the problem being to keep moral standards up to those of the physical.

Aubrey-Riverfield Branch had various helpful hints in home economics at the meeting, these including the renovation of curtains, whitening ivory and maple sugar recipes. A discussion on the meetings of the Prime Ministers took place, and on the Czecho-Slovak situation. Mrs. Bruce read a paper on Russian women. Huntingdon Branch donated \$20 to Huntingdon County Hospital. Cooking recipes were exchanged and household hints given. Franklin Centre had a paper on harmful drugs. A paper on Canada's resources was given, followed by a discussion on the Jews contribution to the world. Mr. R. Reid addressed the meeting on the culture of asparagus, also the growing of endive and rhubarb in the cellar. Howick provided a new mattress for a hospital bed, and held a demonstration on the uses of fats. The guest speaker was Mrs. Charles Smallman, her topic "The Progress of Women". Mrs. John Greig and Mrs. Roy Younie each contributed to the programme in papers, and a poem was read by Mrs. Arthur Kerr. Ormstown had a Mother's Day programme which was carried out in reading and poems. The treasurer was authorized to buy a \$50 Victory Bond. Huntingdon had papers on Scottish customs and Western Canada.

Montcalm County.

The Branch at Rawdon had a visit from the Provincial President, Mrs. Smallman, also Miss Fletcher at the May meeting. A very successful concert was a feature of the work of this Branch, the only one in the County. Members are now busy with supplies for the ditty bags for sailors for the Autumn.

Papineau County.

Miss Abbie Pritchard addressed the County on various phases of W.I. work, and Miss Fletcher spoke on the topic: "Canada in a Changing World."

Rouville County.

Mrs. Alan Turner-Boone of Montreal gave an able and interesting address on the Report of the Survey Committee on the Educational Problems of Canada and Newfoundland. The roll call was answered with quilt blocks.

Shefford County.

South Roxton Branch had a paper on balanced rations, and an exchange of slips and seeds. Granby also had an exchange of slips and seeds, and sent a birthday box to an elderly lady.

Sherbrooke County.

Ascot Branch had articles on Basic English, Home Work, and other interesting subjects on the day's programme. A discussion on garden pests and a distribution of helpful literature, with reports of a salvage drive followed. An Honour Roll for Ascot Consolidated School was unveiled with a fitting ceremony by Rev. Elton Scott of Bishop's University. The Roll was unveiled by Mrs. Lyman Paige, who has five sons overseas, one of whom has paid the great sacrifice for his country, and another is missing.

Belvedere Branch provided a wedding supper for an ex-member. Timely literature helps were ordered to carry on the work. Brompton Branch catered for two sugar parties at the Community Hall, netting about \$50.00 through the venture. Control of Insects was discussed in an address by Mr. W. S. Richardson of Lennoxville Experimental Farm. A course of study on Nutrition was ordered for the use of the Branch. Cherry River had papers on Agriculture and the War Effort. A pie contest with prizes and a "bring and buy" sale were features of an interesting meeting. Programmes in Lennoxville Branch included talks on Flax Growing by Mr. Hartley, and on Health Insurance by Dr. Hill of Sherbrooke.

A paper on Canadian Industries was given in Cherry River Branch. Brompton Road sponsored a play by visiting talent from Windsor Mills which netted \$20 as their half of the proceeds. Prizes were offered for the local school and for the School Fair.

Richmond County.

Richmond Hill Branch made plans to help raise their self-denial fund. Prizes were offered for the local school. Shipton Branch celebrated its tenth birthday.

Stanstead County.

Stanstead County held its annual meeting at Dixville, May 2. There was a good attendance and encouraging reports were presented in all departments.

Ayer's Cliff had articles on "Farming in Scotland by steam heat" and "Sprouting seeds". A speech by Inspector Bartlett on "Retardation" was read and teachers' wage scale discussed. Convenor for Education reported hot lunches for 42 children had been given during four months of cold weather. This branch is taking subscriptions for magazines on a commission basis.

Beebe enjoyed an informal talk on "Wartime Canning".

Dixville had a reading on uses of the Canadian flag, also an article "Princess Elizabeth grows up".

Hatley group held an interesting roll call, "Name and describe the culture of a perennial suited to our locality". Plans were made for the annual Dominion Day dance.

Minton held a seed contest, prizes being given to the winners.

North Hatley made a donation to the Community Club to help defray running expenses. An exhibit of remade articles was held and the booklet "Re-Make Wrinkles" was distributed by the convenor of Home Economics. Collections were taken for the Self-Denial fund.

At Stanstead North "What do you know about Health Insurance?" was the subject of rollcall. A member from this branch attended a meeting of the E.T. Settlement Society and brought back an interesting report.

Tomifobia is making plans to assist with refreshments at the next blood clinic to be held in this locality.

Way's Mills exchanged recipes for "dressed-up" vegetables. An instructive paper on "Timely hints on gardening" was given.

Working Together

by Grace A. Kuhring

The dictator countries have boasted over and over that we are weak and will fall, because we cling to what they call "the soft out-moded principles of democracy". We believe otherwise.

We believe that freedom of speech, freedom of the press, freedom of religion and freedom to live where we choose and work at the job which has the greater appeal, are the very things that make us strong. We want to preserve these freedoms. They are the things for which we are fighting.

What we have sometimes forgotten is that with these freedoms goes responsibility.

The founders of this great land shouldered their responsibilities without murmuring. We read in the early records that while founding fathers cleared the land and fought against hostile Indian tribes, the women were busy, working shoulder to shoulder with their men folk, even helping to clear the land and to fight Indians.

We have no clearing of land and fighting of hostile Indians, today, but we have the job of winning a war and of keeping safe this democratic way of life, which cost our ancestors so dearly in blood, sweat and toil.

Men and women are working together again, shoulder to shoulder in industry and the professions and at the battle fronts.

It seems to me, that in this very fact there is hope that we may again deserve the proud place that those early settlers earned for us and which we in some way have failed to preserve.

This war has stirred the ordinary citizen to demand more insistently than ever before, that we co-operate effectively with other nations to insure that this shall not happen again. We are determined, but at the same time there is much bewilderment.

More books are being read and more discussion groups are being sponsored than ever before. The theme of most of these books and discussions is "Peace . . . and Post-War Planning", or other words which mean the same thing. Many of the books read and the discussions held lead only to further bewilderment and confusion. One is engulfed in a sea of words and meaningless phrases.

We may read many books and hear many ideas but one thing we shall have to do before that much desired better and happier world can be a reality. That is, to give our individual co-operation in making that better world come true.

During the war each of us has been prepared to play a part in the great combined effort to save ourselves. In the post-war world we must be just as willing to play a part to save our way of life. We can all influence public affairs but unless each one plays a full part in a united effort we cannot look for a better or happier world.

Clear thinking and common sense were never more sorely needed than now. Complacent, wishful thinking or mere legislation will not solve the problems that face us.

We hear the thoughtless statement, that, if so much money can be found for war, the same amount could be found for peace. In other words, unlimited Government expenditures would eliminate unemployment. That is quite true, for a time at least, but that is the only point that has been proved. The source of revenue to maintain such payments or the consequences of continuing to borrow and to tax so large a proportion of the national income is never explained. This spending cannot go on forever and when the Government can no longer borrow sufficient funds to continue such a programme, employment will cease to be possible. Honest thinking should make this fact clear to any one.

Honesty may be an old-fashioned virtue, but it is just as important today as in olden times . . . and honesty means more than refraining from house-breaking and pocket-picking. An honest day's work for the money earned, honestly thinking through the various problems that face us, even when the thinking must be deep, honesty, practised by the individual in public office, would make honesty in government, for *we* are 'the government.'

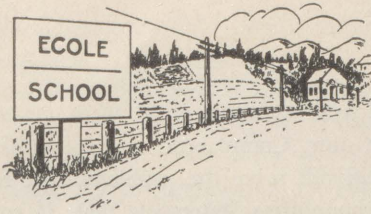
The opportunities for international co-operation will be greater than after any war in the past but this will not be an advantage to us unless we realize that it will take the combined effort of every one of us to make that International Co-operation work.

Represents Rural Women on Prices Board

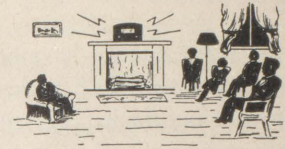
To Mrs. Cameron E. Dow, President of the Federated Women's Institute of Canada, has come the honour of representing the rural women of Canada on the Wartime Prices and Trade Board, for the Consumer Branch. The reports of the Women's Regional Advisory Committees, recently submitted at an Ottawa meeting, one and all commended the assistance given by the Women's Institutes.

What Is A Fluid Ounce?

The fluid ounce as a measure has been used in Canada since the Grade-labelling Statute passed in 1918 provided that "a true and correct description of the contents of the package shall appear on the label". The fluid ounce is the measure of the *volume* of the contents and enables the same sized container to be used for the packing of products which have a different net weight. For instance, a 20 fluid ounce can of spinach weighs 19 ounces, and a 20 fluid ounce of apricots weighs 21 ounces.



LIVING AND LEARNING



New Directions for Farm Forums

Here are the ten points suggested by Alex Sim at the Annual Meeting as new directions for Quebec Farm Forums.

1. Increased registration. The Quebec Council of Farm Forums is now recognized by the Canadian Federation of Agriculture as the representative of English speaking farmers in Quebec. It should have more groups and more members.
2. Careful planning of our fourth night programs, district rallies, and action projects. If the groups are to take action on a district basis, these meetings and this study will pave the way.
3. A program for farm youth with a view to encouraging their participation in Farm Forums.
4. The organization of district committees to give strength to our claim that we are a representative and active member of the Canadian Federation of Agriculture.
5. The encouragement of Rural Life Conferences similar to the one proposed for Ormstown next fall. This might be a project for District Committees but it must be carried out in co-operation with the churches, schools and Women's Institutes.
6. Attention to veteran's legislation and the promotion of local plans to insure proper and adequate resettlement of our servicemen.
7. The promotion of a fully integrated adult education program in Quebec utilizing libraries, films, community schools. The co-operation at proper times with Citizens Forums, and French-speaking groups should be undertaken.
8. Co-operative principles should be carefully studied, and co-operative organization pressed forward prudently, but at the same time relentlessly. In this, we should utilize to the full the services of the Co-opérative Fédérée de Québec.
9. Since our members are all farmers, some of the best in the province, the scientific production and management problems of farmers should not be overlooked. With this in view, the facilities of the Department of Agriculture and Macdonald College should be utilized more fully.
10. In order that these objectives may be realized, we must all as individual members devote ourselves even more zealously to our task through study discussion and action. We must never forget that education must precede action and organization, if we are to have full participation among our members and successful year in, year out activity among our Farm Forums.

Camp Macdonald Highlights

Projectionists' Conference: With National Film Board projectionists from the Maritimes and Eastern Canada meeting at Camp Macdonald for a three-day conference from August 16, 17 and 18, to discuss departmental matters, a great number have expressed their intention of staying over for the first week of the regular Camp, to participate in the Group Work Section, when radio, films and other aids for discussion and group work are being considered.

Scholarships: The Quebec Council of Farm Forums have voted \$150 for scholarships to Camp Macdonald. Applicants will be considered by the Farm Forum Office in consultation with the county representatives. The scholarships are for the first week when emphasis is placed on group work methods.

Interesting Personalities: To the first week of Camp

Macdonald will come Ralph Staples and Ruth McKenzie of the National Farm Forum Office, and Miss Emma Carr, Secretary of the Ontario Citizens' Forums. Helen Watson of the N.F.B., Robert Taylor of the Quebec Film Circuit, and Sheila Trush from the Ontario Farm Forum Office.

Bookmobile: A bookmobile from Vermont Free Library will be of interest to Librarians. Miss Dorothy Randolph is bringing her librarians and her bookmobile for a one-day visit at Camp. This meeting with Miss Randolph and her staff is a "must" for those interested in rural service.

Tour: Looking ahead to the second week of Camp, one of the most interesting projects will be a Tour of Magog. Jean-Charles Falardeau, sociologist and student of E. C. Hughes, noted for his work on Drummondville, will head this survey, and he is now laying plans for this project.

The Canadian Federation of Agriculture

In view of the widespread interest in Mr. Hannam's address at the annual meeting of the Quebec Council of Farm Forums at Macdonald College, June 10, we reprint excerpts from a pamphlet recently issued — *The Canadian Federation of Agriculture, What is it? How it works. What it advocates*. Copies of this pamphlet are available from the Farm Forum Office at Macdonald College at 5c each.

What is the Canadian Federation of Agriculture?

It is a national federation of provincial, inter-provincial, and national organizations of agricultural producers, united to speak with an authoritative voice for the farm people of Canada; and to present their problems, their needs and their point of view to the bar of public opinion, to federal and provincial governments, to industry, commerce, and labor, and in international conferences.

Why was it organized?

Because of the need for ONE unified national organization, qualified to represent all branches of agriculture and all provinces, and competent to speak for Canadian agriculture in national and international affairs.

How was it first constituted?

It was formed at the outset in November, 1935, by federating leading farm organizations already existing throughout Canada.

The Federation was thus an extension of the activities of these organizations which, in their various fields and areas, serve their own members effectively.

Many of the organizations so linked together in the Federation have had varied and valuable experience with production, marketing, policy forming and educational

problems, over a period of more than half a century.

Is it Entirely Non-Partisan Politically?

Yes. The Constitution provides that the Federation shall be non-partisan and that it shall not become a political organization.

Is there a National Office?

Yes. In June, 1941, a Secretary-Treasurer was appointed on a full-time basis, and in July of the same year, a national office was opened in Ottawa as headquarters for the Canadian Federation of Agriculture.

What is the Basis of Membership in the Canadian Federation?

Any organization which is made up of bona fide agricultural producers is eligible for membership in the Federation. Most farm organizations which are represented in the Federation are linked up through affiliation with their own provincial federation or unit. Some larger producer organizations, national or inter-provincial in scope are affiliated directly with the Federation.

The Quebec Council of Farm Forums is one of three Quebec organizations belonging to the Canadian Federation of Agriculture. The other two are the Co-opérative Fédérée de Québec and the Union Catholique des Cultivateurs.

CANADIANS PLAN . . . (Continued from page 7)

some of the economic barriers to the financing of new farm homes it was suggested that: (1) terms of owner-occupancy loans should be simplified a) by the elimination of down payment requirements, and b) by the adjustment of payments to the crop season; (2) rates of interest on loans for construction of farm homes should be reduced considerably. Though the report did not mention any specific interest rate, a reduction to 3.5 per cent seemed to be indicated.

Farm Women:—The Subcommittee on Post-War Problems of Women expressed concern about the existing conditions of farm women. The report indicated that under present conditions, young women are leaving the farms and older women are bearing severe burdens. The Subcommittee felt that modern facilities should be provided such as extension of electrification of the farm home, provision of a plentiful supply of running water and improved sanitation. A rather striking recommendation is the one listing a number of paying enterprises in agriculture such as mushroom culture, dehydration of fruits and vegetables, boarding houses, etc. which might attract young women back to the farm. Where

necessary, it was suggested that the Dominion Department of Agriculture provide some sort of assistance to establish young women in such small businesses.

In concluding, it can be said that a discussion of the future role of agriculture in the Canadian economy centres around the following points: the prosperity of the farming population is an integral part of any post-war economic policy; adequate credit facilities, steady export markets and increased domestic consumption are important items in such a program; there is need for expansion of public services and education in the rural areas; the standard of farm homes all across the country will have to be raised substantially so as to make life in rural areas as attractive as possible, and last but not least, expansion of rural electrification is essential on the farm and in the rural home.

Buy War Savings

Stamps Regularly



THE COLLEGE PAGE

Mac Graduate Directs Agricultural Education in New Brunswick

R. D. Gilbert, a graduate of Macdonald College in the class of 1935, is now Director of Agricultural Education for the Province of New Brunswick, his appointment dating from March 15th last.

Describing his new position for the *Journal*, Mr. Gilbert says, "We aim to open agricultural courses in conjunction with a number of composite High Schools, where rural boys will have an opportunity to take a two-year course consisting of five months each year, beginning about November 1st and closing in April. In each school a man trained in agriculture will be in charge of the agriculture students and will give the agricultural instruction. During the summer supervision will be given in practical projects. Students also will be given appropriate training in mechanics, elementary electricity, woodworking, blacksmithing and forge work. Special instruction will be arranged in elementary book-keeping, farm accounting, public speaking and local leadership.

"We aim to have five courses of this kind open in New Brunswick at different centres this fall."

M. Gilbert's experience during the years since he left college has given him a broad training in the agricultural field which makes him a logical choice for this new and responsible position. During the first year after graduating he was attached to the Experimental Farm at Fredericton. The next two years he spent as agricultural representative at Gagetown, followed by five years in a similar position at Moncton. Last year he was loaned as agricultural advisor to National Selective Service. He is Secretary of the New Brunswick Shorthorn Association and Secretary-Manager of the Maritime Fat Stock Show and Sale.

Our congratulations to Mr. Gilbert, for whom we predict a brilliant career of service to agriculture.



College Welcomes Many Conferences

June was a month of conferences at the College, — and they were of many kinds. Groups from all parts of Canada held sessions in the class rooms and prolonged discussions as they strolled about the grounds.

International Affairs

About 200 members of locals of the Canadian Institute of International Affairs came on June 3-4 to discuss such subjects as Canadian-American relations, immigration into Canada after the war, and post-war reconstruction in relation to the constitution. Included in this group were many men distinguished in the political, scholastic and professional life of Canada.

Farm Radio Forum

Already reported in the *Journal* was the very successful one-day meeting of the Quebec Farm Radio Forum on June 10th.

Education For Citizenship

Two gatherings whose object was the promotion of better citizenship followed one another in the week of June 14th. The Canadian Council on Education for Citizenship under the Chairmanship of Dr. H. M. Tory reviewed several important projects it has undertaken. One of these is the production of a volume setting forth our Canadian heritage of freedom in literature, symbol and song. Another is the sponsorship of a programme of citizenship training for those applying for naturalization. A third is a survey of teaching materials used in Canada and the United States to teach the children of each country about its neighbour. Dr. John Robbins is the Secretary of this council.

The National Planning Committee of Citizens Forums convened June 15-17 and was presided over by Dr. W. H. Brittain of the College.

The Church and Adult Education

Thirty United Church Clergy, from Quebec and Eastern Ontario spent three days, June 19-21, considering methods of Adult Education as related to the work of the Church. Leaders in the group were Rev. C. M. Stewart of Stanstead and Rev. Frank Fidler and Kenneth MacMillan of Ottawa.

Women's Institute

Elsewhere in this issue is reported the annual convention of Women's Institutes. The College was glad to welcome back this important gathering after a lapse of one year.

As we go to press the Summer School for Teachers is in progress.

This will be followed next month by the Clergy Summer School and in September by the meeting of the Anglican House of Bishops.

THE MACDONALD COLLEGE STUDY OUTLINES

ANIMAL PRODUCTION SERIES: *A study in 5 units—price 30 cents; with supplementary bulletins, 40 cents.*

In this series are discussed the general nutritive properties and individual peculiarities of the feeds most commonly used in the feeding of dairy cattle, sheep and swine. Attention is drawn to the nutritional requirements of the different classes of stock and it is pointed out how adequate rations can be prepared to supply these needs.

CROP PRODUCTION SERIES: *A study in 12 units—price 70 cents; with supplementary bulletins, 80 cents.*

This deals with matters related to the maintenance of crop productivity at a high level — tillage, rotation, fertilizers and manures, weed control, seed, hay crops, pasture, grain crops, corn, alfalfa and silage making.

POULTRY PRODUCTION SERIES: *A study in 12 units. Price 75 cents; with supplementary bulletins, 85 cents.* This is a general analysis of the place and need of the poultry flock on the general farm; methods of stock selection and general management; poultry products as a cash crop on the farm; special problems of marketing the products.

CO-OPERATION SERIES: *A study in 12 units. Price 75 cents; with supplementary bulletins, \$1.50.* This is a study on the purposes, principles and possibilities of co-operation; the essentials to co-operative success; the function and organization of credit unions, consumers' and producers' co-operatives; problems of management; the place of education in co-operation and a brief treatment of co-operative medicine.

HOME ECONOMICS SERIES: *A study in 6 units. Price 30 cents; with supplementary bulletins, 35 cents.* This series emphasizes the diet as a factor in good health including the place of milk, cereals, grain products, vegetables, the protein foods, etc. It discusses the problem of planning adequate meals at moderate cost, analyzes the food budget and suggests suitable menus.

RURAL LIFE SERIES: *Education, Health, Recreation, in 6 units. Price 80 cents. (But residents of Quebec may obtain free by writing to Director of Protestant Education, Quebec, P.Q.)* Tells about the organization, management

and how to improve our rural schools; how to improve the health services of people in rural areas; why rural people should develop better recreational facilities and how to do so.

ECONOMIC SERIES: *16 printed pamphlets, Price 50 cents for the entire set. Published by the Canadian Association for Adult Education, 198 College Street, Toronto, Ontario.* These cover a number of specific problems of interest to the farmer. The nature of their content is indicated by the list of titles below: 1. Are there too many farmers? 2. Should Canada restrict the farming of sub-marginal land? 3. Will increased production benefit the farmer? 4. Should Canada encourage land settlement of immigrants? 5. Can we improve our taxation system? 6. How far will improved farm management methods help? 7. What does the farmer need in the way of credit? 8. Can the economic position of the farmer be improved through the medium of a government supported policy of research, experimentation and extension work? 9. What can we help to accomplish through Fairs and Exhibitions? 10. Are government grading regulations and marketing services of value to the farmer? 11. What are the conditions necessary for the efficient marketing of farm products? 12. What can the farmer gain through organization? 13. To what extent can co-operative organizations solve the economic problems of the farmer? 14. Is any form of governmental control or regulation over the marketing of farm products necessary, desirable or practicable for Canada? 15. If some form of regulation is adopted, what should it be? What shall we do about it?

To get one or all of these outlines, simply write to the Macdonald College Journal, Macdonald College, Que., and enclose the necessary amount.

A GUIDE TO GROUP DISCUSSION: The technique of group discussion. How to organize a study group. Where to secure study material. How to conduct group meetings, "Neighbour Nights" or associated study club meetings. Suggested reference pamphlets.

Price 10 cents each : 7 cents in lots of 100 or more. A copy is mailed free with each order for the study outlines listed above.

MACDONALD COLLEGE

(McGILL UNIVERSITY)

Faculty of Agriculture

THE DIPLOMA COURSE—of two winters' duration (November to March) arranged for the convenience of farm boys—eminently practical—comparatively inexpensive.

THE DEGREE COURSE, B.Sc. (Agr.)—extending over four years. A sound scientific course and an all round education, with opportunity to specialize in the various branches of agriculture represented in the profession and in farm practice.

GRADUATE COURSES (M.Sc., Ph.D.)—advanced training for scientific workers. Specialist courses in Agronomy, Nutrition, Bacteriology, Chemistry, Entomology, Horticulture, Parasitology and Plant Pathology.

All Quebec students in the Faculty of Agriculture receive a grant from the Provincial Government of \$9.00 per month of attendance to apply on account of board and lodging.

*Application for Admission to be Made to The Registrar,
Macdonald College, Que.*

School of Household Science

HOMEMAKER COURSE, ONE YEAR—discontinued for duration of the war.

DEGREE COURSE (B.Sc.(H.Ec.))—extending over four years and training for professional life.

Tuition is free in the first course for daughters of farmers of the Province of Quebec.

*Application for Admission to be Made to The Registrar
Macdonald College, Que.*

School for Teachers

The School for Teachers gives a thorough training to those intending to teach in the Protestant schools of the Province.

Tuition free to all students, and bursaries of \$100.00 each given to those students of the elementary class who promise to teach three years in an elementary rural school in the Province of Quebec. For the duration of the war this School will be operated at Strathcona Hall, 772 Sherbrooke St. W., Montreal.

*Application for Admission to be Made to Dr. W. P. Percival
Department of Education, Quebec.*